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May 17, 2017

VIA ELECTRONIC MAIL

Mr. Steve Sadowsky
Historic Preservation Officer
City of Austin
505 Barton Springs Road
Austin, TX 78704

Re: C14H-1982-0001-F - Larmour Block, Building F, 916 Congress Avenue – Supplemental Construction Mitigation Plan

Dear Steve:

Our firm represents MVA-916 Congress, LLC. We respectfully submit the supplemental Construction Mitigation Plan (the “Plan”). The Plan satisfies a condition of the approved Certificate of Appropriateness (attached to the Mitigation Plan as Exhibit D), dated August 17, 2013. The amended Plan addresses additional questions and requests made by the Historic Landmark Commission and aims to satisfy concerns posed by adjacent neighbors.

It is also worth noting MVA-916 Congress, LLC assembled a highly experienced and well respected design, engineering and construction team. Specifically, Cardo Haynes Whaley and Sixth River Architects collaborated on 901 Congress – the Texas Public Policy Foundation’s headquarters. In that project, there was also a historic façade which was preserved during construction, and there was a preserved common party wall. Much of the 916 Congress approach is honed and tailored based on the design and construction experience this team experienced working on 901 Congress.

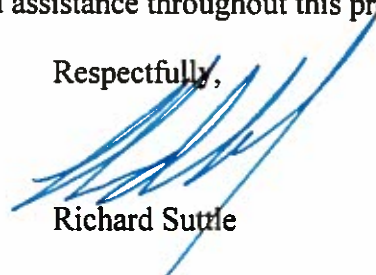
To conclude, we are pleased to submit the supplemental Plan for consideration at the May 22, 2017 Historic Landmark Commission meeting. We believe the Plan’s detail and supporting design documents satisfies the level of detail necessary to meet Historic Landmark Commission criteria.

ARMBRUST & BROWN, PLLC

Page 2

We remain available should you have any questions or require additional information.
Thank you for your recommendation and assistance throughout this process.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Richard Suttle', is written over the word 'Respectfully,'.

Richard Suttle

Enclosure



Steve Sadowsky

Historic Preservation Officer

City of Austin

512-974-6454

RE: 916 Congress Construction Mitigation Plan

May 17, 2017

Mr. Sadowsky,

Per request of the committee at the April 24th Historic Landmark Commission Certificate of Appropriateness Review Committee meeting, the Burt Group has revised the formal mitigation plan to reflect your direction and our active negotiations with our neighbors. We submitted the original version on March 10th.

The requested mitigation plan for 916 Congress outlined below addresses five primary concerns discussed in detail at the Landmark Commission meetings: 1) demolition, pier drilling, and structural shoring, 2) dust control, 3) vibration and noise control, 4) water infiltration, and 5) roof protection. The Burt Group intends to be a good neighbor during the construction of the project and will work with the neighbors in any way possible to inform them of our construction plans and timelines, give appropriate notice of activities, and minimize inconveniences to the extent possible.

1) Demolition, Pier Drilling, and Structural Shoring

Due to the sensitive nature of the project, we will *selectively* demolish the existing structure, taking great care to leave intact and undamaged the historic stone façade on Congress Ave and the common masonry walls shared by our neighbors. The existing structure foundations are unknown, therefore during the period when the building is demolished to the existing slab, we will selectively demolish a small 3'x3' area of the existing slab adjacent to each common wall in order to dig a test pit and uncover more information about the common wall foundation footings. If we find a "bell" shaped footing under either common wall, we will consult Cardno, the structural engineer of record. Then, if necessary, we will re-orient piers to avoid proximity to the revealed common wall foundations. If the footing is minimal or non-existent, The Burt Group will proceed as planned. All foundation planning will be in conjunction with Terracon Consultants, Inc.'s Geotech report, project number 96105134 (see Exhibit A).

burtgroup.com

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The Burt Group will set scaffolds where necessary to provide access to the various interior and exterior areas, ensuring careful removal of materials. Hand saws will be used to aid demolition in this phase of the project. During this period, the structural shoring (as shown on city approved structural plan sheet S0.01) will be installed concurrent with the demolition of the existing structure. Per structural drawing notes, temporary post shores will be added to the project as necessary to secure existing structure as interior stud walls are removed.

We have provided a stamped and reviewed shoring plan and associated shop drawings (see Exhibit B). These shoring braces will be installed just below the existing floor joists to allow for safe removal of the existing structure after installation of the bracing. As noted on sheet S0.01 for Existing Demising wall and Congress Ave. Historic facade bracing sequence, the existing walls will have to be exposed and evaluated during the selective demolition process to review the existing wall conditions. The design intent of the structural shoring is to continue loading the walls the same way they have been accustomed over their lifespan. The Burt Group will utilize skytrac forklift equipment in order to safely hang the pipe shoring braces in place at the specified elevations.

The Engineer of Record has confirmed that no structural treatment to the joist pockets will be required when the existing joists are removed from the common wall unless damage is observed based on field observations. Since the masonry wall always has had these joist pocket voids, we will simply remove the wood joists and leave the wall as is. There may be an aesthetic desire for filling with a stone if exposed, but an architectural fix is not required.

Once the existing structure is demolished and removed, The Burt Group will sawcut the concrete slab foundation and expose the areas that will receive structural piers and structural grade beams. During the concrete foundation demolition portion of the project, a mini-excavator and small piece of loading equipment will be needed on site to facilitate the breaking and loading of concrete on trucks for removal. A concrete sawcutting company will cut the existing foundation before any breaking of concrete to aid in the careful demolition of the foundation, minimizing disturbance to the common walls and historical facade. During this portion of the project, we will communicate with the neighbors regularly on what to expect and finish as quickly as possible. In all sawcutting and pier drilling activities the neighbors will be notified 24 hours in advance.

The neighbors have expressed concerns regarding the potential interference of the horizontal shoring between neighboring buildings interfering with the pier driller's low clearance drill rig (see Exhibit C for ramp drawing drill rig specifications and picture). The low clearance drill rig operates at a max height of 13' from grade. The Burt Group will work with Cardno to demolish part of the existing retaining wall (the project plans call for adding additional thickness to this wall) so that we are able to construct the ramp for the low clearance drilling rig closer to the alley way, which at 35' in length will give ample head room so as not to interfere with the shoring. No shoring will need to be removed for the low clearance drill rig to access the drilling required for the project.

2) Dust Control

Although we are not able to eliminate dust from this project, we will minimize it to the extent possible. The selective, hand cut nature of the demolition will avoid much of the dust typically associated with large scale, mass-



demolition. First off, we have agreed to mist all areas before cutting. Secondly, The Burt Group will wrap and seal the existing glazing and doors on the historical storefront on the Congress Ave side to provide an extra barrier from dust entering the public right of way at the sidewalk and pedestrian protection. Additionally, with approval from the neighbors, the Burt Group will wrap any existing glazing and/or doorways and openings on their buildings prior to starting demolition to provide an added barrier from inadvertent dust created from the demolition and construction activities. Lastly, as laid out in our formal written proposal to 914 Congress on April 17th, we are amenable to offering periodic janitorial service at our expense.

3) Vibration and Noise Control

Although we will need to apply a certain amount of force to demolish and remove the existing structure, use of hand tools will substantially decrease vibration during demo.

We will utilize a professional engineering firm specialized in vibration consulting to establish site specific values and limits and monitor adherence during the drilling process.

The project owner MVA 916 will hire Vibra-tech Inc. for all digital documentation of existing common wall conditions, establishing vibration thresholds, and vibration monitoring & consulting. The neighbors will be present to document the condition of their walls with Vibra-tech before starting construction. This documentation will include a discussion on existing cracks and a protocol upon discovery of new cracks by the neighbors or during periodic site visits by our engineer. This video will be shared between all parties prior to commencement of demolition and will be established as a baseline to measure any subsequent issues arising from demolition or construction activities. We will correct reasonable issues that arise from construction and demolition at no cost to the neighbors.

Also, once acceptable agreements have been negotiated, we will update our insurance policy to indemnify the immediate neighbors and name them as additional insureds.

4) Water Infiltration

We do not expect water infiltration on the neighbors' property to be caused by the proximity and height of the new building. While it is reasonable to assume that over the course of construction, during a rain shower, excess water will fall from the project onto the neighbors' roof systems, the Burt Group does not advise any specific action plan outside of the coping detail shown to be constructed in the current project documents. Before construction and after construction water will continue drain to the alley as it does currently.

We will submit products to our Structural Engineer for approval before construction commencement to satisfy the note in the structural plans that call for providing water resistant protection to existing walls. The Burt Group is currently considering three options for waterproofing the interior masonry walls when they become exposed after demolition: slurry cement coat and water resistant paint, rolled on liquid waterproofing membrane, and



mechanically fastened pond liner sheets draped over the exposed masonry walls. We will base the final decision on the neighbor input and effectiveness of the system..

5) Roof Protection

We do not expect any issues to endanger our neighbors' roofs. Although our cranes will pass loads over neighbor's parking lot *only* during the weekend each of assembly and disassembly of the tower cranes, they will never pass a load over the neighbors' actual structures.

On a typical load pick from the staging area in the back alley directly in front of our project site, the crane:

1. secures the load,
2. lifts the load vertically, directly from the staging area,
3. trollies the load into the mast of the tower crane,
4. pivots the load around the mast within the boundary of the 916 property, and then
5. trollies it back to be lowered to the appropriate place.

Additionally, we will install safety netting below all work areas on the sides of the building to ensure materials and tools do not fall onto their roof.

In conclusion, this revised mitigation plan addresses any known issues prior to demolition and construction of the existing and new structures per approved building permit #2015-112070-BP (see attached Exhibit D). If any issues arise during the demolition and construction of the new project, we will work with the project ownership to address them in a timely manner at no cost to the neighbors. The Burt Group and property owner intend to be good neighbors, and will be considerate of their business operations while erecting the new structure.

Sincerely,



Buzz Hughes

Project Manager



Exhibit A-
Geotech Report

Geotechnical Engineering Report

Texas Public Policy Foundation – Phase 1

916 Congress Avenue

Austin, Texas

October 28, 2010

Terracon Project No. 96105134

Prepared for:

Texas Public Policy Foundation

Austin, Texas

Prepared by:

Terracon Consultants, Inc.

Austin, Texas

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Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

October 28, 2010



Texas Public Policy Foundation
900 Congress Avenue, Suite 400
Austin, Texas 78701

Attention: Ms. Arlene Wohlgemuth
P: 512-472-2700
F: 512-472-2728
E: arlene@texaspolicy.com

Regarding: Geotechnical Engineering Report
Texas Public Policy Foundation – Phase 1
916 Congress Avenue
Austin, Texas
Terracon Project No. 96105134

Dear Ms. Wohlgemuth:

Terracon Consultants, Inc. (Terracon) is pleased to submit our Geotechnical Engineering Report for the proposed reconstruction of 916 Congress Avenue for the Texas Public Policy Foundation in Austin, Texas. We trust that this report is responsive to your project needs. Please contact us if you have any questions or if we can be of further assistance.

We appreciate the opportunity to work with you on this project and look forward to providing additional Geotechnical Engineering and Construction Materials Testing services in the future.

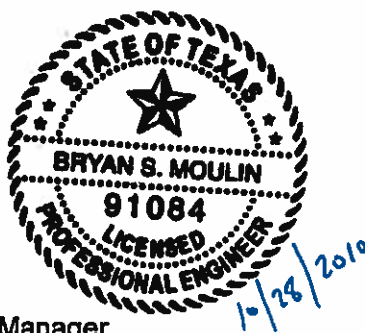
Sincerely,
Terracon Consultants, Inc.
(TBPE Firm Registration: TX F3272)

M. Anitha

Anitha Medichetti, P.E.
Project Geotechnical Engineer

Bryan S. Moulin

Bryan S. Moulin, P.E.
Principal, Geotechnical Department Manager



Copies Submitted: Addressee: (2) Bound & (1) Electronic
Mr. Jeff Needles – Sixthriver Architects (jneedles@sixthriver.com)
Mr. Mark Merryman, P.E. – Haynes Whaley Associates (mark.merryman@hayneswhaley.com)



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Geotechnical

Environmental

Construction Materials

Facilities

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APPENDIX A – FIELD EXPLORATION

Exhibit A-1	Site Location Map
Exhibit A-2	Boring and Test Pit Location Plan
Exhibits A-3 through A-5	Boring and Test Pit Logs
Exhibit A-6	Field Exploration Description

APPENDIX B – LABORATORY TESTING

Exhibit B-1	Laboratory Testing
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APPENDIX C – PHOTOGRAPHS

Exhibit C-1	Photographs
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APPENDIX D – SUPPORTING DOCUMENTS

Exhibit D-1	Unified Soil Classification
Exhibit D-2	General Notes
Exhibit D-3	Description of Rock Properties

GEOTECHNICAL ENGINEERING REPORT
TEXAS PUBLIC POLICY FOUNDATION – PHASE 1
916 CONGRESS AVENUE
AUSTIN, TEXAS
Project No. 96105134
October 28, 2010

1.0 INTRODUCTION

Terracon is pleased to submit our Geotechnical Engineering Report for the proposed reconstruction of 916 Congress Avenue for the Texas Public Policy Foundation in Austin, Texas. This project was authorized by Ms. Arlene Wohlgemuth of Texas Public Policy Foundation, through signature of our "Agreement for Services" on September 9, 2010. The project scope was performed in general accordance with Terracon Proposal No. P96100844, Revision 2 dated September 9, 2010, except the interior borings were omitted due to access restrictions and the subsurface conditions found in the exterior boring and test pits.

The purpose of this report is to describe the subsurface conditions observed at the one boring and two test pits drilled for this study, analyze and evaluate the test data, and provide recommendations with respect to:

- Foundation design and construction for the building addition;
- Seismic site classification according to IBC 2006;
- Lateral earth pressures for below grade walls; and
- Site, subgrade, and fill preparation.

2.0 PROJECT INFORMATION

2.1 Project Description

ITEM	DESCRIPTION
Site layout	See Exhibit A-2, Boring Location Plan, in Appendix A.
Structures	The project will include demolition of the existing subject structure (with the exception of the façade along Congress Avenue and its two shared walls) and replacing it with a 5 to 6-story structure.
Building construction	Unknown at this time, but assumed to be steel-frame construction with composite concrete floor slabs on metal decks.
Finished floor elevation	Unknown, but anticipated to match the lowest ground floor

ITEM	DESCRIPTION
	elevation of the existing subject structure nearest to Congress Avenue.
Maximum column loads	Up to 750 kips (assumed).
Maximum allowable settlement	Columns: 1-inch (assumed) Walls: ¾ inch over 40 feet (assumed)
Grading	On the east portion of the site, the new structure is anticipated to closely match the existing ground floor, thus minimal cuts and fills would be anticipated. On the western half (rear parking lot), the new structure is planned to extend to the same finished floor elevation as the eastern half, thus cuts of up to one below-grade level (estimated at about 10 to 14 feet) are proposed.
Below-Grade Areas	One basement level is planned, resulting in estimated cuts of up to about 10 to 14 feet in the rear portion of the site.
Permanent Retention/Shoring Systems	Anticipated to be needed in the rear portion of the site due to adjacent structures and planned below-grade level.

2.2 Site Location and Description

ITEM	DESCRIPTION
Location	The site is located at 916 Congress Avenue in Austin, Texas. (See Exhibit A-1 of Appendix A).
Existing Improvements	<p>The subject site is currently occupied by a two-story 5,000 square foot structure used by the Little City Espresso Bar/Cafe.</p> <p>The existing building footprint extends from the Congress Avenue sidewalks about halfway to the west towards the alley. Compared to the rear portion of the site (which is a parking lot), the ground floor is about one level below existing grades.</p> <p>The rear half of the site is surface asphalt parking lot.</p>
Adjacent Improvements	<p>Adjacent structures with common walls are located immediately north and south of the 916 Congress Avenue structure.</p> <p>The adjacent structure to the south (914 Congress) extends to the west about as far as the existing subject structure.</p> <p>The adjacent structure to the north (918 Congress) extends to the west very close to the alley. The front portion of this adjacent structure is at about the same ground floor elevation and extends about halfway to the west towards the alley, similar to the subject structure. Beyond this, the adjacent</p>

ITEM	DESCRIPTION
	structure has a level that extends to the alley with a floor elevation very near to the rear parking lot of the subject structure (i.e., it does not have a below-grade level in the rear portion of the lot).
Existing topography	The existing building's ground floor is at about the same level as the Congress Avenue sidewalks. The rear parking lot is about one level above the ground floor and slopes slightly upward to the alley.

3.0 SUBSURFACE CONDITIONS

3.1 Geology

Based on our review of available geologic information¹ and the recovered samples, the site lies within an area characterized by Upper Colorado River terrace deposits of Quaternary Age overlying Austin Group limestone of Upper Cretaceous Age. The alluvial terrace deposits generally consist of varying thicknesses of clayey to gravelly soils, often becoming coarser with depth, which were deposited through historic stream/river action. The Austin Group is generally comprised of tan to gray chalky limestone and marls, and is commonly overlain by a variable thickness of moderate to high plasticity clayey soils and/or residual soils (severely weathered portions of the limestone).

3.2 Typical Profile in Boring and Test Pits

The boring and test pits were excavated through the existing pavement which consisted of about 2 to 2.5 inches of asphaltic concrete overlying 3.5 to 6 inches of base material.

Description	Approximate Depth Range of Stratum (feet)	Material Encountered	Consistency/Density
Stratum I ¹	0 to 2.6	Silty Clayey Sand (SC-SM) to Clayey Sand (SC)	Very Dense
Stratum II ³	2.5 to 50	Austin Group Limestone	-

¹. The Stratum I reddish brown to brown to tan soils exhibited very low shrink/swell potential as indicated by a measured plasticity index (PI) of about 3 percent and a fines content (percent passing the No. 200 sieve) of about 25 percent. An in-situ moisture content was about 4 percent dry of the corresponding plastic limit. A pocket penetrometer value of over 4.5 tons per square foot (tsf) was recorded for the stratum.

¹ Garner, L.E. and Young, K.P., "Environmental Geology of the Austin Area: An Aid to Urban Planning", Bureau of Economic Geology, The University of Texas at Austin, 1976.

-
2. Stratum II tan to light gray to gray Austin Group limestone was encountered at depths of about 2.5 to 2.6 feet below the existing pavements. A standard penetration resistance value of about 50 blows per 2 inches of penetration was recorded for the stratum. Measured values of Recovery and RQD ranged from about 62 to 99 percent and 32 to 98 percent, respectively. Measured uniaxial compressive strengths of intact samples ranged from about 90 to 691 kips per square feet (ksf). The lower standard penetration resistance values, Recovery and RQD values are due to weathered and clay and marly zones within the limestone.
-

Conditions encountered at the boring location and test pits are indicated on the individual boring and test pit logs. Stratification boundaries on the boring and test pit logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. Details for the boring and test pits can be found on the boring and test pit logs in Exhibits A-3 through A-5 of Appendix A.

3.3 Discussion of Test Pit Findings

As mentioned, two test pits were excavated in the rear parking lot adjacent to the existing wall of 918 Congress Avenue. Test Pit TP-1 was located towards the western end of the existing wall. Test Pit TP-2 was located on the eastern end of the existing wall near the rear sidewalk/stairwell entrance into 916 Congress. Selected photographs of the test pits and the rear parking lot are included in Appendix C.

At TP-1, the brick wall extended to a depth of about 22.5 inches below the top of the asphaltic pavement. The last three courses of brick extended outward slightly, indicating a possible widening of the lower courses; however, we only observed the southern (outside) face of the bricks, not the northern (inside) face. The lowest course of bricks at TP-1 were resting on the reddish brown clayey sand soils containing a significant amount of gravel and cobbles. Intact limestone was encountered at a depth of about 31 inches below the top of the asphaltic pavement, which corresponds to about 8.5 inches below the bottom of the brick. We did not find any evidence of an existing foundation (shallow footing or drilled pier) for the wall.

At TP-2, the bottom of the brick wall was staggered, but extended to a maximum depth of about 31.5 inches below the top of the asphaltic pavement. The last one to two courses of brick extended outward slightly, indicating a possible widening of the lower courses; however, we only observed the southern (outside) face of the bricks, not the northern (inside) face. The lowest course of bricks at TP-2 were resting on intact tan limestone. The top of the limestone varied along with the bottom of the brick at TP-2, but was encountered at a maximum depth of about 31.5 inches below the top of the asphaltic pavement. We did not find any evidence of an existing foundation (shallow footing or drilled pier) for the wall.

3.4 Groundwater

Boring B-1 was dry augered to a depth of about 4 feet below existing grade then drilled to completion depth using wet rotary drilling techniques to facilitate rock coring, making subsequent water readings difficult to obtain. No groundwater was observed during drilling operations. No groundwater was observed in the test pits.

Although not encountered, groundwater seepage is possible at the site, particularly after periods of wet weather within pervious seams of the on-site soils, along the soil/limestone interface, and in fissures/fractures in the limestone. During periods of wet weather, zones of seepage may appear and isolated zones of “perched water” may become trapped (or confined) by zones possessing a low permeability. Groundwater conditions at the site could fluctuate as a result of seasonal and climatic variations.

During a conversation with the 916 Congress Avenue tenant and the building owner of 914 Congress Avenue, there was mention of water infiltration into grease pit excavations for restaurants along this block of Congress Avenue.

Please note that it often takes several hours/days for water to accumulate in a borehole, and geotechnical borings are relatively fast, short-term boreholes that are backfilled the same day. Long-term groundwater readings can more accurately be achieved using monitoring wells. Please contact us if this is desired. Groundwater conditions should be evaluated immediately prior to construction.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

The following recommendations are based upon the data obtained in our field and laboratory programs, project information provided to us, and on our experience with similar subsurface and site conditions.

4.1 Earthwork

Construction areas should be stripped of vegetation, trees, topsoil, existing foundations, existing pavements, utilities, and other unsuitable material. There are two medium to large-sized trees along the south property boundary in the rear parking lot, along with one small tree near the northeast corner of the rear parking lot. Remnants of foundation units from previously existing structures on the site should be removed to a minimum depth of 24 inches below final subgrade elevation. All utilities and associated bedding material that are planned to be abandoned/demolished should be completely removed from within the proposed building area. If not possible, the abandoned utility lines should be thoroughly grouted and plugged with flowable fill.

Once final subgrade elevations have been achieved (including the over-excavation required for building pad), the exposed subgrade should be carefully proofrolled with a 20-ton pneumatic roller or a fully loaded dump truck to detect weak zones in the subgrade. Weak areas detected during proofrolling, as well as zones containing debris or organics and voids resulting from removal of boulders, etc. should be removed and replaced with soils exhibiting similar classification, moisture content, and density as the adjacent in-situ soils. Proper site drainage should be maintained during construction so that ponding of surface runoff does not occur and cause construction delays and/or inhibit site access.

Subsequent to proofrolling, and just prior to placement of fill, the exposed subgrade within the construction areas should be evaluated for moisture and density. If the moisture and/or density requirements do not meet the criteria described in the table below, the subgrade should be scarified to a minimum depth of 6 inches, moisture adjusted and compacted to at least 95 percent of the Standard Proctor (ASTM D 698) maximum dry density. Select fill and on-site soils should meet the following criteria.

FILL TYPE ¹	USCS CLASSIFICATION	ACCEPTABLE LOCATION FOR PLACEMENT
Imported Select Fill ^{2,3}	CL, SC, and/or GC (5≤PI≤20)	Select fill material should be used for all grade adjustments within the building limits.
General Fill ⁴	SC, SC-SM	General fill is for use within other non-structural areas of the site.

- ^{1.} Prior to any filling operations, samples of proposed borrow and/or on-site materials should be obtained for laboratory testing. The tests will provide a basis for evaluation of fill compaction by in-place density testing. A qualified soil technician should perform sufficient in-place density tests during the filling operations to evaluate that proper levels of compaction, including dry unit weight and moisture content, are being attained.
- ^{2.} Imported select fill should consist of crushed limestone base material meeting the requirements of the Texas Department of Transportation (TxDOT) 2004 Standard Specifications Item 247, Type A, Grade 3, or a low-plasticity clayey soil with a plasticity index between 5 and 20 percent, a maximum gravel content (percentage retained on No. 4 sieve) of 40 percent, and rocks no larger than 4 inches in their largest dimension. As an alternative, a low-plasticity granular fill material which does not meet these specifications may be utilized only if approved by Terracon.
- ^{3.} The excavated Stratum I soils and Stratum II limestone may be used as select fill in the building areas provided that it meets the select fill requirements given above. The fill soils should be properly processed as outlined below and also moisture conditioned and recompacted to at least 95 percent of the Standard Proctor (ASTM D 698) maximum dry density.

The excavated material should be acceptable provided that it is processed such that a relatively well-graded grain size distribution with a maximum rock size of 4 inches is achieved and the plasticity index is less than 20 percent. Please note that segregation of higher plasticity clay soils (generally dark brown to brown in color) and removal of higher plasticity zones within the Stratum I/II soils/limestone will be necessary to maintain plasticity indices of the material within the acceptable range. In some situations, the difference between more highly plastic clay and lower plasticity silty

clay soils, as well as the presence of the clayey zones within the limestone, may not be readily distinguishable without the performance of appropriate laboratory testing. If the highly plastic clayey zones are not removed, the material may be unsuitable for use as select fill. After initial processing of the fill material, samples should be submitted to Terracon for approval of proper gradation, plasticity index, and maximum rock size prior to use as select fill. We recommend that periodic testing be performed throughout the material excavation phase to check for conformance with the select fill requirements given above.

It has been our experience that proper processing of excavated limestone often involves such processes as breaking down of larger rock with equipment, screening, removal of more highly plastic clay layers, etc. The Contractor's proposed methods of processing these materials should be reviewed prior to initiation of construction to check that these methods will produce an acceptable select fill material with a proper grain size distribution.

4. Excavated on-site soils and processed limestone, if free of organics, debris, and rocks larger than 4 inches, may be considered for use as fill in landscape or other general areas.

The use of rock fill in areas where underground utilities areas are planned will likely result in construction difficulties during trenching and excavation of the utility alignments. If utilities are to be placed in areas that are planned to receive rock fill, we recommend that the maximum rock size be limited to no greater than 4 inches for the full depth of the rock fill in these areas to reduce the potential for construction difficulties during utility trench excavation.

- The maximum lift height recommended is 1.5 feet, which will be controlled by the maximum boulder size. A maximum nominal rock size of 9 inches should be maintained.
- The largest nominal rock size of any given lift shall not exceed one-half of the lift height.
- The upper 12 inches of the fill placement shall be composed of lifts no more than 6 inches in compacted thickness (8-inch loose lift thickness) and contain no rocks larger than 4 inches in their largest dimensions.
- The rock fill shall be of sufficient size distribution such that no voids are present between larger rock sizes during placement.
- Such a rock fill placement operation should be continuously monitored by Terracon personnel to check that the fill operation is in accordance with the recommendations stated herein. (In-place density testing for such a fill operation is often not practical.)
- Please note that rock fills can create increased difficulty in terms of future excavation for utilities, etc. This should be considered prior to and during placement of the fill.

4.1.1 Compaction Requirements

ITEM	DESCRIPTION
Fill Lift Thickness	The fill soils should be placed on prepared surfaces in lifts not to exceed 8 inches loose measure, with compacted thickness not to exceed 6 inches.
Moisture/Density Control	All fill should be placed in uniform lifts compacted to at least 95 percent of the Standard Proctor (ASTM D 698) maximum dry density. Select fill and on-site soils should

ITEM	DESCRIPTION
	be moisture conditioned to between -3 and +3 of optimum moisture content.

4.1.2 Grading and Drainage

The performance of the foundation system for the proposed structure will not only be dependent upon the quality of construction, but also upon the stability of the moisture content of the near-surface soils. Therefore, we highly recommend that site drainage be developed so that ponding of surface runoff near the structure does not occur. Accumulation of water near the building may cause significant moisture variations in the soils adjacent to the foundation, thus increasing the potential for structural distress.

Positive drainage away from the structure must be provided during construction and maintained through the life of the proposed project. Infiltration of water into excavations should be prevented during construction. It is important that foundation soils are not allowed to become wetted. All grades must provide effective drainage away from the building during and after construction. Exposed (unpaved) ground should be sloped at a minimum 2 percent away from the building for at least 10 feet beyond the perimeter of the building. Water permitted to pond next to the building can result in greater soil movements than those discussed in this report. Estimated movements described in this report are based on effective drainage for the life of the structure and cannot be relied upon if effective drainage is not maintained.

Roof runoff and surface drainage should be collected and discharged away from the structure to prevent wetting of the foundation soils. Roof gutters should be installed and connected to downspouts and pipes directing roof runoff into storm water collection systems, or discharged on to positively sloped pavements. Watering of vegetation, if any, should be performed in a timely and controlled manner and prolonged watering should be avoided. Landscaped irrigation adjacent to the foundation units should be minimized or eliminated. Special care should be taken such that underground utilities do not develop leaks with time.

4.2 Below-Grade Excavation

As mentioned previously, below-grade basement construction (about 10 to 14 feet deep) is planned at the western half of the site. Open cut slopes will not be possible at this site due to the existing buildings, the apparent absence of a footing under the 918 Congress exterior wall, and the presence of medium to large trees along the southern perimeter, thus an excavation retention system will be required to maintain a stable excavation. The most common retention systems utilized for downtown Austin projects typically involve drilled soldier pier systems. For the anticipated cuts next to the existing building, an equivalent fluid density (which assumes at-rest earth pressure condition) of 75 pcf for the on-site Stratum I clayey sand soils and 40 pcf for

Stratum II limestone should be considered for temporary retention system design. In addition, surcharge loading should be included in temporary retention design. If groundwater is observed in the excavation, please contact Terracon to discuss the impact on the earth pressure given above. Excavation retention systems should be designed by a licensed professional engineer experienced in the design of such systems.

A monitoring program should be established to check the lateral deflection of soldier pier retention systems and the adjacent shared walls/foundations of 914 and 918 Congress. We recommend that survey points be established on the adjacent brick walls, floor slabs, roofs, etc. and periodically checked during excavation and foundation installations. Such a monitoring program will often detect areas of excessive deflection of the wall system, which could result in damage to adjacent utilities, buildings, etc. Terracon would be pleased to assist in the development and implementation of such a monitoring program.

In regards to worker safety, Occupational Safety and Health Administration (OSHA) Safety and Health Standards require the protection of workers in trench and "non-trench" excavation situations. The OSHA guidelines and directives should be adhered to by the Contractor during construction to provide a safe working environment.

4.3 Temporary Groundwater Control

Although no groundwater was encountered during our drilling operations, the presence of groundwater should be anticipated in the below-grade excavation, especially after periods of wet weather. Temporary groundwater control during construction would typically consist of perimeter gravel-packed drains sloping toward common sump areas for groundwater collection and removal. Placement of drain laterals within the excavation could be required to remediate isolated water pockets.

4.4 Below-Grade Wall and Floor Slab Drainage

We recommend that a permanent perimeter drainage system be designed adjacent to below-grade walls and along the perimeter of below-grade floor slabs. The perimeter collector drain system should extend a minimum depth of 12-inches below the bottom of the basement floor slab elevation. The wall drainage system is usually incorporated into the slab drainage system.

A collector drain should be provided along the base of the below-grade walls. In addition, a drainage layer (described below in this section) should be provided beneath below-grade floor slab systems. The entire wall drain system should be designed to gravity flow toward common sump areas for collection and removal of water. The collector drains should preferably consist of a clean, washed gravel section continuously wrapped in filter fabric (meeting TxDOT DMS-6200, Type I fabric). Perforated collector pipes with a minimum diameter of 4 inches should be provided at/near the bottom of the aggregate.

In addition, the following recommendations should be implemented for below-grade walls and floor slabs.

- The below-grade walls and floor slabs should be fully waterproofed and freely-draining aggregate (or a drainage mat) should also be provided behind the below-grade walls. (If a mat is used, the manufacturer of the geotextile drainage mat should be consulted in regards to applicability, selection, and placement of the drainage mat. In addition, a representative of the drainage mat manufacturer should be present during initial and/or critical phases of the installation such that proper installation techniques are utilized.) The only exception to the above would be the sump pit area mentioned below.
- The drainage aggregate or mat should extend over the full height and length of the below-grade walls. Proper control of surface water percolation will help to prevent buildup of higher wall pressures. In unpaved areas, if any, the final 12 inches of backfill should preferably consist of cohesive soil. This will help to reduce percolation of surface water into the backfill.
- A minimum 6-inch-thick underslab granular drainage course should be installed immediately below the below-grade floor slab. The granular drainage course should be sloped to drain toward the perimeter drainage system and/or sump-pit areas.
- The underslab drain system should consist of clean, washed aggregate meeting the specifications for a Type B or C material according to TxDOT Item 556. The perimeter gravel-packed collector trenches should extend to a depth of at least 12 inches below the bottom of the below-grade floor slab with a minimum width of at least 18 inches. Perforated collector pipes with a minimum diameter of 4 inches should be provided within all trench drains. The trenches should be sloped to drain toward a sump-pit area.

4.5 Foundation System

Based upon the subsurface conditions observed during this exploration, a drilled straight-sided pier foundation system bearing into the Stratum II Austin Group limestone would be appropriate to support the proposed building addition. As an alternative, a spread footing foundation system may also be appropriate to support the building addition. Recommendations for these types of foundation system are provided below.

4.5.1 Design Recommendations – Drilled Pier Foundation System

Principal column and wall loads for the proposed building may be supported on drilled and straight-sided piers embedded at least 4 feet into the Stratum II tan to light gray to gray Austin Group limestone.

Description	Drilled Pier Design Parameter
Minimum embedment into bearing stratum ¹	4 feet
Minimum pier diameter	18 inches
Bearing pressure (net allowable)	75,000 psf
Side Friction (net allowable)	6,000 psf for pier portions embedded beyond the 4 foot minimum embedment depth
Minimum percentage of steel ²	0.5 percent
Approximate total settlement ³	¾ inch
Estimated differential settlement ⁴	Approximately ½ to ¾ of total settlement

- ^{1.} To bear within the Stratum II limestone. The minimum pier length (concreted) should be 2 pier diameters.
- ^{2.} Due to shallow limestone encountered in the boring and test pits, uplift does not appear to be a concern at this site, assuming proper site preparation and building pad construction. However, we do recommend that the minimum percentage of reinforcing steel be no less than ½ percent of the gross shaft area and extend over the full length of the pier.
- ^{3.} Provided proper construction practices are followed. For adjacent piers, we recommend a minimum edge-to-edge spacing of at least 1 pier diameter (or 2 pier diameters center-to-center) based on the larger diameter of the two adjacent piers. In locations where this minimum spacing criterion cannot be accomplished, Terracon should be contacted to evaluate the locations on a case-by-case basis.
- ^{4.} Will result from variances in subsurface conditions, loading conditions and construction procedures, such as cleanliness of the bearing area or flowing water in the shaft.

4.5.2 Design Recommendations – Spread Footings

As an alternative, spread and/or continuous footings may be used for the proposed building addition. The footings should be placed to bear at least 12 inches into the Stratum II limestone, provided proper subgrade preparation as outlined in **Section 4.4** is implemented.

Description	Design Parameter
Bearing Stratum	Stratum II Limestone
Minimum embedment below final grade ¹	24 inches below final grade (lowest slab elevation)
Minimum embedment into limestone	12 inches into Stratum II
Bearing Pressures	Stratum II Limestone Net allowable total load – 10,000 psf
Approximate total settlement ²	Stratum II Limestone ¾ inch
Estimated differential settlement ³	Approximately ½ to ¾ of total settlement
Allowable passive resistance ⁴	Stratum II Limestone 1,500 psf per foot of depth

Description		Design Parameter
Coefficient of sliding friction ⁵	Stratum II Limestone	0.7
Uplift Resistance ⁶		Foundation Weight (150 pcf) & Soil Weight (120 pcf)

1. Lowest adjacent final grade at the time of construction.
2. This estimated post-construction settlement of the shallow footings is assuming proper construction practices are followed.
3. Differential settlements may result from variances in subsurface conditions, loading conditions and construction procedures. The settlement response of the footings will be more dependent upon the quality of construction than upon the response of the subgrade to the foundation loads.
4. Passive resistance should be neglected in the first 12 inches of limestone embedment. Care should be taken to avoid disturbance of the footing bearing area since loose material could increase settlement and decrease resistance to lateral loading. If the footing is formed during construction, the open space between the footing and the in-situ soils should be backfilled with concrete.
5. Lateral loads transmitted to the footings will be resisted by a combination of soil-concrete friction on the base of the footings and passive pressure on the side of the footings. We recommend that the allowable frictional resistance be limited to 1,500 psf for footings in Stratum II limestone.
6. The ultimate uplift capacity of shallow footings should be reduced by an appropriate factor of safety to compute allowable uplift capacity.

4.5.3 Foundation Construction Considerations

4.5.3.1 Drilled Pier Foundations

Drilled pier foundations should be augered and constructed in a continuous manner. Concrete should be placed in the pier excavations following drilling and evaluation for proper bearing stratum, embedment, and cleanliness. The piers should not be allowed to remain open overnight before concrete placement. Surface runoff or groundwater seepage accumulating in the excavation should be pumped out and the condition of the bearing surface should be evaluated immediately prior to placing concrete. The drilling equipment utilized should be readily capable of excavating the Austin Group limestone observed at this site. Drilling equipment with insufficient torque and/or augers/bits/core barrels that are not suited for variable and/or hard rock conditions will likely result in poor production rates.

Although not encountered in the boring or test pits, zones of groundwater inflow and/or sloughing soils are a possibility during pier construction at this site. Therefore provisions should be incorporated into the plans and specifications to utilize casing to control sloughing and/or groundwater seepage during pier construction. Removal of the casing should be performed with extreme care and under proper supervision to minimize mixing of the surrounding soil and water with the fresh concrete. If water infiltration becomes excessive, slurry drilling techniques (or other drilling means) could be necessary. Concrete should exhibit a six-inch slump with a \pm

one inch tolerance. Under no circumstances should loose soil be placed in the space between the casing and the pier sidewalls. The concrete should be placed using a rigid tremie or by the free-fall method provided the concrete falls to its final position through air without striking the sides of the hole, the reinforcing steel cage or any other obstruction. A drop chute should be used for this free-fall method.

The use of casing should help to minimize groundwater inflow into the pier excavation. If seepage persists even after casing installation, the water should be pumped out of the excavation immediately prior to placing concrete. If groundwater inflow is too severe to be controlled by pumping, the concrete should be tremied to the full depth of the excavation to effectively displace the water. In this case, a “clean-out” bucket should be utilized to remove loose soil and/or rock fragments from the pier bottom before placing steel and concrete.

Although not encountered in our nominal 3-inch diameter geotechnical borings, larger gravel, cobbles, and boulders could be encountered in the pier excavations. We should also note that new foundation construction may encounter fill and other obstructions (concrete, reinforcing steel, other miscellaneous debris, etc.) from previous construction on this site. The contractor should have equipment readily capable of penetrating concrete obstructions, gravel backfill, and similar conditions.

4.5.3.2 Spread Footings

Spread footings should be neat excavated if possible. If neat excavation is not possible, the foundation should be properly formed. If a toothed bucket is used, excavation with this bucket should be stopped approximately 6 inches above final grade and the footing excavation completed with a smooth-mouthed bucket or by hand labor. Debris in the bottom of the excavation should be removed prior to steel placement. The foundation excavation should be sloped sufficiently to create internal sumps for runoff collection and removal. If surface runoff water or groundwater seepage in excess of one inch accumulates at the bottom of the foundation excavation, it should be collected, removed, and not allowed to adversely affect the quality of the bearing surface.

4.5.3.3 Foundation Construction Monitoring

The performance of the selected foundation system for the proposed structure will be highly dependent upon the quality of construction. Thus, we recommend that the foundation installation be monitored by Terracon to identify the proper bearing strata and depths and to help evaluate foundation construction. We would be pleased to develop a plan for foundation monitoring to be incorporated in the overall quality control program.

4.6 Floor Slab Subgrade Preparation

Information about existing and proposed grades and FFE for the proposed building has not been provided to Terracon at this time. However, we assume that the planned FFE for the east portion of the site will closely match the existing ground floor, thus minimal cuts and fills are required. If this assumption is incorrect, Terracon should be notified to review and modify and/or verify recommendations in writing.

At-Grade Floor Slab Preparation

A properly placed and compacted select fill pad with a minimum thickness of 12 inches should be provided under all portions of the proposed building. With the above subgrade preparation, post-construction floor slab movements should be on the order of about 1 inch.

Basement Level Floor Slab Preparation

The proposed basement level excavation of 10 to 14 feet will terminate within the Stratum II limestone.

A properly placed and compacted select fill pad with a minimum thickness of 12 inches should be provided under all portions of the basement. The upper 6 inches of this select fill may consist of the underslab drainage course mentioned previously in Section 4.4.

Prior to placement and compaction of select fill, the soil subgrade should be compacted as outlined in **Section 4.1 – Earthwork**. Material and placement requirements for select fill, as well as other subgrade preparation recommendations, are presented in **Section 4.1 – Earthwork**. We suggest the use of crushed limestone base as the select fill material within the upper 6 inches of the fill pad from a standpoint of construction access during wet weather, as well as from a standpoint of floor slab support.

4.7 Grade Beams

Grade beams spanning between drilled pier foundation units may be cast at grade provided the subgrade in the beam areas is prepared as outlined in **Section 4.6**. Grade beams should be designed to span across the drilled pier foundations without subgrade support, due to stress-strain incompatibility between the different bearing materials. For footings, the grade beams could be designed as continuous footings, if bearing into limestone.

We recommend that on-site clayey soils (at least 18 inches deep) be utilized for backfill adjacent beams at the exterior of the building (to reduce potential infiltration of surface water into the

subgrade in these areas). The exterior clayey backfill should be compacted to at least 95 percent of the ASTM D 698 dry density at a moisture content at or above optimum moisture. On the interior sides of the perimeter grade beams, backfill should consist of properly compacted select fill or flowable backfill (COA Item 402 or TxDOT Item 401), not sand or gravel.

4.8 Seismic Design Information

Code Used	Seismic Design Category	Site Class Designation
2006 International Building Code (IBC)	A ¹	B ²

1 Per IBC Section 1613.5.1.

2 Per IBC Table 1613.5.2. The 2006 IBC requires a site soil profile determination extending a depth of 100 feet for seismic site classification. The current scope requested does not include the required 100 foot soil profile determination. Borings extended to a maximum depth of approximately 50 feet and this seismic site class definition assumes that limestone and/or materials with similar characteristics are below the maximum depth of the subsurface exploration. Additional exploration to deeper depths would be required to confirm the conditions below the current depth of exploration. Alternatively, a geophysical exploration could be utilized in order to attempt to justify a higher seismic class.

4.9 Permanent Below-Grade Walls

If permanent below-grade walls (up to 14 feet deep) are cast directly against the in-situ soils (with waterproofing and drainage incorporated), then the walls should be designed for an at-rest earth pressure condition utilizing an equivalent fluid density of 75 pounds per cubic foot (pcf) for the Stratum I soils and 40 pcf for the Stratum II limestone. The effect of surcharge loads, where applicable, should be incorporated into the wall pressure diagram by adding a pressure component equal to 0.5 times the surcharge load to the full height of the wall. If the depth of the planned below-grade excavation increases and/or groundwater is observed at higher elevations in the excavation, please contact Terracon to discuss the impact on the earth pressures given above.

5.0 GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide testing and observation during excavation, grading, foundation installation, and other construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between borings, across the

site, or due to the modifying effects of weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include, either specifically or by implication, any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials, or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.




















For any excavation construction activities at this site, all Occupational Safety and Health Administration (OSHA) guidelines and directives should be followed by the Contractor during construction to provide a safe working environment. In regards to worker safety, OSHA Safety and Health Standards require the protection of workers from excavation instability in trench situations.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX A
FIELD EXPLORATION

LOG OF BORING NO. B-1

CLIENT: Texas Public Policy Foundation Austin, Texas	PROJECT: Texas Public Policy Foundation - Phase 1
BORING LOCATION: See Exhibit A-2	SITE: 916 Congress Avenue Austin, Texas

Graphic Log	DESCRIPTION	DEPTH, FEET	SAMPLES						TESTS				
			USCS SYMBOL	TYPE	SPT OR TXDOT CPT BLOWS/INCH	CALIBRATED HAND PENETROM., TSF	RECOVERY, %	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, KSF
Approx. Surface Elevation: NA													
	0.5	PAVEMENT		BS									
	2.5	2.5" asphalt; 3.5" base material	SC-SM	ST		4.5+		10		17	3	25	
		SILTY CLAYEY SAND		SS	N=50/2			6					
		Very dense, reddish brown to tan, with dark brown clay seams, gravel, cobbles and limestone fragments											
		LIMESTONE (Austin Group)		RC			95 80						
		Medium to moderately hard, tan, slightly weathered											
	10.0	-gray 6.5 to 7.5 feet							127				636
		LIMESTONE (Austin Group)		RC			98 98		124				379
		Medium to moderately hard, gray to light gray											
		-tan marly clay 14 to 15 feet											
		-weathered 15 to 20 feet		RC			79 32		130				90
													
				RC			97 69		125				438
													
				RC			99 86						
													
				RC			98 65		128				451
													
				RC			91 50						
													
													
													
													
													
													
													
													
													

Continued Next Page

Continued Next Page

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: Dry Augered 0 to 4 feet; Wet Rotary 4 to 50 feet

WATER LEVEL OBSERVATIONS, FEET		
WL	▽	NE
WL	▽	
WL		


Terracon

DATE DRILLED
9/24/2010
PROJECT NUMBER
96105134

Page 1 of 2
EXHIBIT
A-3

LOG OF BORING NO. B-1

CLIENT:	Texas Public Policy Foundation Austin, Texas	PROJECT:	Texas Public Policy Foundation - Phase 1
BORING LOCATION:	See Exhibit A-2	SITE:	916 Congress Avenue Austin, Texas

Graphic Log	DESCRIPTION	DEPTH, FEET	SAMPLES					TESTS						
			USCS SYMBOL	TYPE	SPT OR TXDOT CPT BLOWS/INCH	CALIBRATED HAND PENETROM., TSF	RECOVERY, % / RQD, %	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN, %
	Approx. Surface Elevation: NA													
	<u>LIMESTONE (Austin Group)</u> Medium to moderately hard, gray to light gray -weathered and marly 40 to 45 feet	45		RC			62 32		125				123	
				RC			80 48		127				691	
	50.0 Boring Terminated at 50 feet	50												

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: Dry Augered 0 to 4 feet; Wet Rotary 4 to 50 feet

WATER LEVEL OBSERVATIONS, FEET			DATE DRILLED	Page 2 of 2
WL	NE		9/24/2010	EXHIBIT A-3
WL			PROJECT NUMBER	
WL			96105134	

LOG OF BORING NO. TP-1

CLIENT:	Texas Public Policy Foundation Austin, Texas	PROJECT:	Texas Public Policy Foundation - Phase 1
BORING LOCATION:	See Exhibit A-2	SITE:	916 Congress Avenue Austin, Texas

Graphic Log	DESCRIPTION	DEPTH, FEET	SAMPLES					TESTS						
			USCS SYMBOL	TYPE	SPT OR TXDOT CPT BLOWS/INCH	CALIBRATED HAND PENETROM. TSF	RECOVERY, % / RQD, %	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN, %
	Approx. Surface Elevation: NA													
	PAVEMENT 2" asphalt; 6" base material	0.7		BS										
	CLAYEY SAND Reddish brown to brown to tan, with gravel, cobbles and limestone fragments -brick wall of northern building terminated at about 22.5 inches below top of pavement			GRAB										
	2.6 -limestone encountered at approximately 31 inches below top of pavement Test Pit Terminated at 2.6 feet													

STRATIFICATION LINES REPRESENT APPROXIMATE
BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN
SITU, THE TRANSITION BETWEEN STRATA MAY BE
MORE GRADUAL.

REMARKS: Excavated with a backhoe 0 to 2.6 feet

WATER LEVEL OBSERVATIONS, FEET			Terracon	DATE DRILLED	Page 1 of 1
WL	▽	▽		10/1/2010	EXHIBIT A-4
WL	▽	▽		PROJECT NUMBER	
WL				96105134	

LOG OF BORING NO. TP-2

CLIENT:	Texas Public Policy Foundation Austin, Texas	PROJECT:	Texas Public Policy Foundation - Phase 1
BORING LOCATION:	See Exhibit A-2	SITE:	916 Congress Avenue Austin, Texas

Graphic Log	DESCRIPTION	DEPTH, FEET	SAMPLES						TESTS					
			USCS SYMBOL	TYPE	SPT OR TXDOT CPT BLOWS/INCH	CALIBRATED HAND PENETROM., TSF	RECOVERY, % / RQD, %	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, KSF	FAILURE STRAIN, %
	Approx. Surface Elevation: NA													
	<u>PAVEMENT</u> 0.5 2" asphalt; 4" base material			BS										
	<u>CLAYEY SAND</u> Reddish brown to brown to tan, with gravel, cobbles and limestone fragments -brick wall of northern building terminated at about 31.5 inches below top of pavement -limestone encountered at approximately 31.5 inches below top of pavement 2.6 Test Pit Terminated at 2.6 feet			GRAB										

STRATIFICATION LINES REPRESENT APPROXIMATE
BOUNDARIES BETWEEN SOIL AND ROCK TYPES. IN
SITU, THE TRANSITION BETWEEN STRATA MAY BE
MORE GRADUAL.

REMARKS: Excavated with a backhoe 0 to 2.6 feet

WATER LEVEL OBSERVATIONS, FEET			Terracon	DATE DRILLED	Page 1 of 1
WL	▽	▽		10/1/2010	EXHIBIT A-5
WL	▽	▽		PROJECT NUMBER	
WL				96105134	

Field Exploration Description

Subsurface conditions were evaluated by drilling one boring (B-1) to a depth of about 50 feet and excavating two test pits (TP-1 and TP-2) to depths of about 31 to 31½ inches below top of pavement within the existing rear parking lot. The boring was drilled with truck-mounted rotary drilling equipment and the test pits were excavated with a backhoe at the approximate locations shown on Exhibit A-2 of Appendix A. Boring and test pit depths were measured from the existing pavement surface at the time of our field activities.

After completion, the boring was backfilled with excess soil and bentonite pellets and then capped with cold-patch asphalt. The test pits were backfilled and lightly compacted by rolling with the backhoe. Excess soils were left in piles next to the adjacent building wall. The test pit excavations were not leveled or patched with asphalt.

The Logs of Boring and Test Pit, which include the subsurface descriptions, types of sampling used, and additional field data for this study, are presented on Exhibits A-3 through A-5 of Appendix A. Criteria for the "Unified Soil Classification System" and "General Notes" defining terms, abbreviations and descriptions used on the boring logs are presented in Exhibits C-1 through C-3 of Appendix C.

The surficial soil sample was recovered using a thin-walled, open-tube sampler (Shelby tube). A pocket penetrometer test was performed on the sample of cohesive soil in the field to serve as a general measure of consistency.

The upper portion of limestone was sampled by means of the Standard Penetration Test (SPT). This test consists of measuring the number of blows required for a 140-pound hammer free falling 30 inches to drive a standard split-spoon sampler 12 inches into the subsurface material after being seated 6 inches. This blow count or SPT "N" value is used to estimate the engineering properties of the stratum.

Once competent rock was encountered, boring B-1 was advanced with Nx coring equipment. Visual classifications of all of the samples were performed in the field and percentages of Recovery and Rock Quality Designation (RQD) were calculated from recovered rock cores. Recovery is defined as the percentage of core recovered as a function of the length of core run drilled. The RQD is a modified measurement of core recovery which indirectly takes into account fractures and/or softening in the rock mass by summing up only pieces of sound core which are 4 inches or greater in length as a percentage of the total core run.

Samples were removed from the samplers in the field, visually classified, and appropriately sealed in sample containers to preserve the in-situ moisture contents. Samples were then placed in core boxes for transportation to our laboratory in Austin, Texas.

APPENDIX B
LABORATORY TESTING

Laboratory Testing

Samples obtained during the field program were visually classified in the laboratory by a geotechnical engineer. A testing program was conducted on selected samples, as directed by the geotechnical engineer, to aid in classification and evaluation of engineering properties required for analyses.

Results of the laboratory tests are presented on the Logs of Boring and Test Pit, located on Exhibits A-3 through A-5 of Appendix A, and/or are discussed in **Section 3.0 – Subsurface Conditions** of the report. Laboratory test results were used to classify the soils encountered as generally outlined by the Unified Soil Classification System.

Samples not tested in the laboratory will be stored for a period of 30 days subsequent to submittal of this report and will be discarded after this period, unless we are notified otherwise.

APPENDIX C
PHOTOGRAPHS

Geotechnical Engineering Report

Texas Public Policy Foundation ■ 916 Congress Avenue, Austin, Texas
Photos Taken October 1, 2010 ■ Terracon Project No. 96105134

Terracon



Photo 1 – Rear Parking Lot Prior to Test Pits.



Photo 2 – Brick Wall of 918 Congress on North Side of Parking Lot.



Photo 3 – Stairwell Entrance to 916 Congress..



Photo 4 – South Property Line facing Alley. Note medium-sized tree along property line.



Photo 5 – Southwest Corner of Property. Note large-sized tree leaning into Subject Property.



Photo 6 – TP-1. Note brick courses extending outward over reddish brown clayey sand.

Geotechnical Engineering Report

Texas Public Policy Foundation ■ 916 Congress Avenue, Austin, Texas
Photos Taken October 1, 2010 ■ Terracon Project No. 96105134

Terracon



Photo 7 – TP-1. Bottom of bricks resting on clayey sand.



Photo 8 – TP-1. Close-up of brick contact with clayey sand.



Photo 9 – Excavated Spoils at TP-1.



Photo 10 – TP-1 at completion. Spoils were pushed back into excavation and rolled with backhoe.



Photo 11 – TP-2. Bricks extend downward to rest on limestone.



Photo 12 – Brick face at TP-2.

Geotechnical Engineering Report

Texas Public Policy Foundation ■ 916 Congress Avenue, Austin, Texas

Photos Taken October 1, 2010 ■ Terracon Project No. 96105134

Terracon



Photo 13 – TP-2. Bottom of bricks is staggered, but rest on limestone.



Photo 14 – Excavated Spoils at TP-2.



Photo 15 – TP-2 at completion. Spoils were pushed back into excavation and rolled with backhoe.



Photo 16 – Inside the Stairwell, looking at 918 Congress wall. Bricks are resting on limestone that has been mortared in the past.



Photo 17 – Inside the Stairwell, looking at 918 Congress wall and entrance. Some mortar has been used to reduce erosion and weathering.



Photo 18 – Inside the Stairwell, looking at 918 Congress wall and entrance. Limestone has weathered and eroded in some areas.

APPENDIX D
SUPPORTING DOCUMENTS

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests^A

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A					Soil Classification				
					Group Symbol	Group Name ^B			
Coarse-Grained Soils More than 50% retained on the No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines ^C	Cu ≥ 4 and 1 ≤ Cc ≤ 3 ^C		GW	Well-graded gravel ^F			
			Cu < 4 and/or 1 > Cc > 3 ^C		GP	Poorly graded gravel ^F			
		Gravels with Fines More than 12% fines ^C	Fines classify as ML or MH		GM	Silty gravel ^{F,G,H}			
			Fines classify as CL or CH		GC	Clayey gravel ^{F,G,H}			
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines ^D	Cu ≥ 6 and 1 ≤ Cc ≤ 3 ^E		SW	Well-graded sand ^I			
			Cu < 6 and/or 1 > Cc > 3 ^E		SP	Poorly graded sand ^I			
		Sands with Fines More than 12% fines ^D	Fines classify as ML or MH		SM	Silty sand ^{G,H,I}			
			Fines Classify as CL or CH		SC	Clayey sand ^{G,H,I}			
			Fine-Grained Soils 50% or more passes the No. 200 sieve	Silt and Clays Liquid limit less than 50	inorganic	PI > 7 and plots on or above "A" line ^J		CL	Lean clay ^{K,L,M}
						PI < 4 or plots below "A" line ^J		ML	Silt ^{K,L,M}
	organic	Liquid limit - oven dried			< 0.75	OL	Organic clay ^{K,L,M,N}		
		Liquid limit - not dried					Organic silt ^{K,L,M,O}		
Silt and Clays Liquid limit 50 or more	inorganic	PI plots on or above "A" line			CH	Fat clay ^{K,L,M}			
		PI lots below "A" line			MH	Elastic Silt ^{K,L,M}			
	organic	Liquid limit - oven dried	< 0.75	OH	Organic clay ^{K,L,M,P}				
		Liquid limit - not dried			Organic silt ^{K,L,M,O}				
Highly organic soils		Primarily organic matter, dark in color, and organic odor			PT	Peat			

^ABased on the material passing the 3-in. (75-mm) sieve

^BIf field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^CGravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

^DSands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

$$^E Cu = D_{60}/D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

^FIf soil contains $\geq 15\%$ sand, add "with sand" to group name.

^GIf fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^HIf fines are organic, add "with organic fines" to group name.

^IIf soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^JIf Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^KIf soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

^LIf soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.

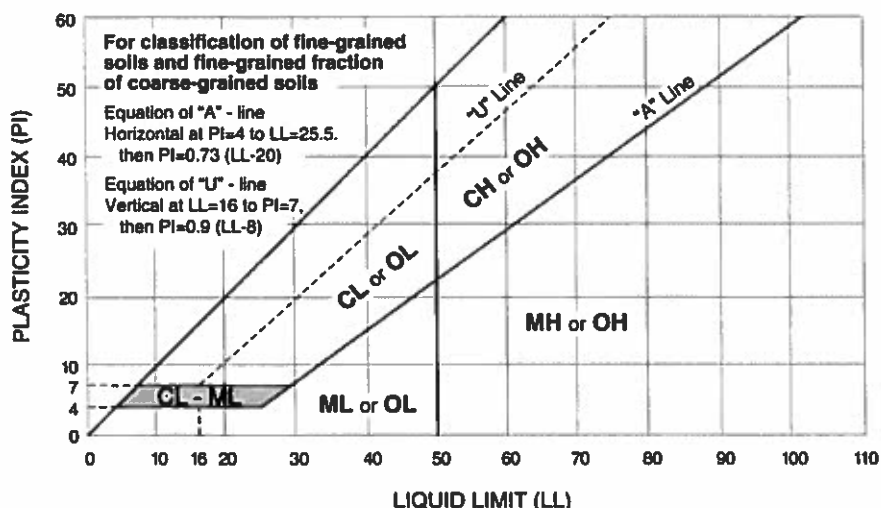
^MIf soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

^NPI ≥ 4 and plots on or above "A" line.

^OPI < 4 or plots below "A" line.

^PPI plots on or above "A" line.

^QPI plots below "A" line.



Terracon

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube - 2" O.D., unless otherwise noted	PA:	Power Auger
TC:	TxDOT Cone Penetrometer Test	HA:	Hand Auger
CF:	Continuous Flight Auger	RC:	Rock Core
BS:	Bulk Sample or Auger Sample	WB:	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value". For TxDOT cone penetrometer (TC) the penetration value is reported as the number of blows required to advance the sampler 12 inches or penetration in inches after 100 blows using a 170-pound hammer falling 24 inches, reported as "blows per foot" or inches per 100 blows, and is not considered equivalent to the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	N/E:	Not Encountered
WCI:	Wet Cave in	WD:	While Drilling		
DCI:	Dry Cave in	BCR:	Before Casing Removal		
AB:	After Boring	ACR:	After Casing Removal		

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

<u>Unconfined Compressive Strength, Qu, psf</u>	<u>Standard Penetration or N-value (SS) Blows/Ft.</u>	<u>Consistency</u>
< 500	0 - 1	Very Soft
500 - 1,000	2 - 4	Soft
1,000 - 2,000	4 - 8	Medium Stiff
2,000 - 4,000	8 - 15	Stiff
4,000 - 8,000	15 - 30	Very Stiff
8,000+	> 30	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

<u>Standard Penetration or N-value (SS) Blows/Ft.</u>	<u>TxDOT Cone Penetrometer (TC) Blows/Ft.</u>	<u>Relative Density</u>
0 - 3	0-8	Very Loose
4 - 9	8-20	Loose
10 - 29	20-80	Medium Dense
30 - 49	80-5"/100	Dense
> 50	5"/100 to 0"/100	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term(s) of other constituents</u>	<u>Percent of Dry Weight</u>
Trace	< 15
With	15 - 29
Modifier	> 30

GRAIN SIZE TERMINOLOGY

<u>Major Component of Sample</u>	<u>Particle Size</u>
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75 mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

<u>Descriptive Term(s) of other constituents</u>	<u>Percent of Dry Weight</u>
Trace	< 5
With	5 - 12
Modifiers	> 12

PLASTICITY DESCRIPTION

<u>Term</u>	<u>Plasticity Index</u>
Non-plastic	0
Low	1-10
Medium	11-30
High	> 30

Terracon

GENERAL NOTES

Description of Rock Properties

WEATHERING

Fresh	Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer if crystalline.
Very slight	Rock generally fresh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rock rings under hammer if crystalline.
Slight	Rock generally fresh, joints stained, and discoloration extends into rock up to 1 in. Joints may contain clay. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer.
Moderate	Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some show clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.
Moderately severe	All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick.
Severe	All rock except quartz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually left.
Very severe	All rock except quartz discolored or stained. Rock "fabric" discernible, but mass effectively reduced to "soil" with only fragments of strong rock remaining.
Complete	Rock reduced to "soil". Rock "fabric" not discernible or discernible only in small, scattered locations. Quartz may be present as dikes or stringers.

HARDNESS (for engineering description of rock – not to be confused with Moh's scale for minerals)

Very hard	Cannot be scratched with knife or sharp pick. Breaking of hand specimens requires several hard blows of geologist's pick.
Hard	Can be scratched with knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen.
Moderately hard	Can be scratched with knife or pick. Gouges or grooves to ¼ in. deep can be excavated by hard blow of point of a geologist's pick. Hand specimens can be detached by moderate blow.
Medium	Can be grooved or gouged 1/16 in. deep by firm pressure on knife or pick point. Can be excavated in small chips to pieces about 1-in. maximum size by hard blows of the point of a geologist's pick.
Soft	Can be gouged or grooved readily with knife or pick point. Can be excavated in chips to pieces several inches in size by moderate blows of a pick point. Small thin pieces can be broken by finger pressure.
Very soft	Can be carved with knife. Can be excavated readily with point of pick. Pieces 1-in. or more in thickness can be broken with finger pressure. Can be scratched readily by fingernail.

Joint, Bedding and Foliation Spacing in Rock^a

Spacing		Joints	Bedding/Foliation
Less than 2 in.		Very close	Very thin
2 in. – 1 ft.		Close	Thin
1 ft. – 3 ft.		Moderately close	Medium
3 ft. – 10 ft.		Wide	Thick
More than 10 ft.		Very wide	Very thick

Rock Quality Designator (RQD) ^b		Joint Openness Descriptors	
RQD, as a percentage	Diagnostic description	Openness	Descriptor
Exceeding 90	Excellent	No Visible Separation	Tight
90 – 75	Good	Less than 1/32 in.	Slightly Open
75 – 50	Fair	1/32 to 1/8 in.	Moderately Open
50 – 25	Poor	1/8 to 3/8 in.	Open
Less than 25	Very poor	3/8 in. to 0.1 ft.	Moderately Wide
		Greater than 0.1 ft.	Wide

- a. Spacing refers to the distance normal to the planes, of the described feature, which are parallel to each other or nearly so.
b. RQD (given as a percentage) = length of core in pieces 4 in. and longer/length of run.

References: American Society of Civil Engineers, Manuals and Reports on Engineering Practice - No. 56. Subsurface Investigation for Design and Construction of Foundations of Buildings. New York: American Society of Civil Engineers, 1976.
U.S. Department of the Interior, Bureau of Reclamation, Engineering Geology Field Manual.

Terracon

Exhibit B-
Stamped Shoring Plan



slabwerkschicks
1001 S. MICHIGAN AVENUE
SUITE 100-4
AUSTIN, TEXAS 78704
512.388.8888
www.slabwerkschicks.com



916 CONGRESS
916 CONGRESS AVE.
AUSTIN, TX 78701

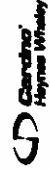
Project No.	2013-0289-00
Client	916 CONGRESS AVE. PH
Author	SLABWERKSCHICKS
Checker	SLABWERKSCHICKS
Scale	AS SHOWN
Notes	1. SEE 10171 - 0001 (REV. 08/11)

2013-0289-00
916 CONGRESS AVE. PH

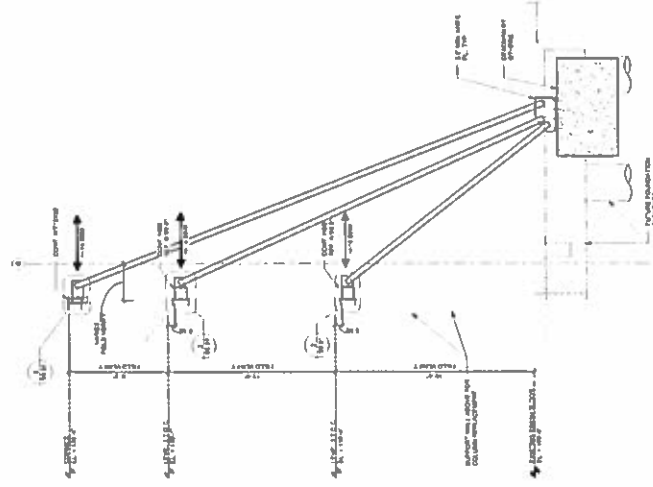
**EXISTING WALL
BRACING PLANS AND
DETAILS**

S0.01

08/11/11

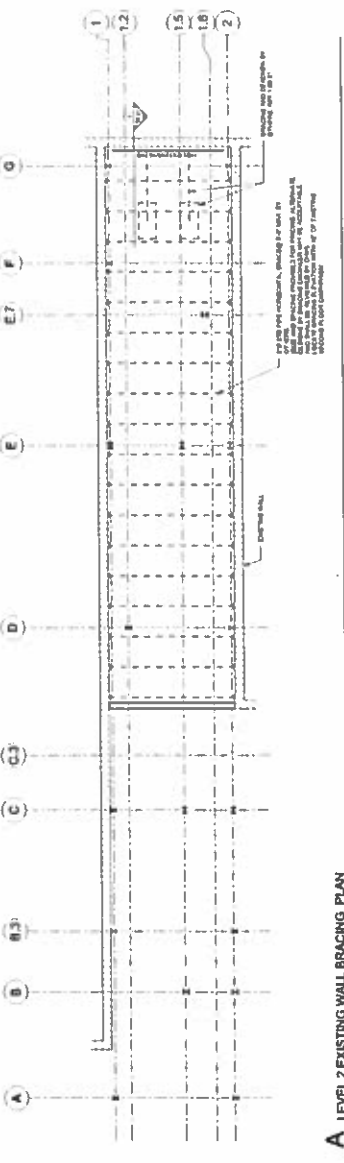


Cardinal Hayes Whiskey
1001 S. MICHIGAN AVENUE
SUITE 100-4
AUSTIN, TEXAS 78704
512.388.8888
www.slabwerkschicks.com

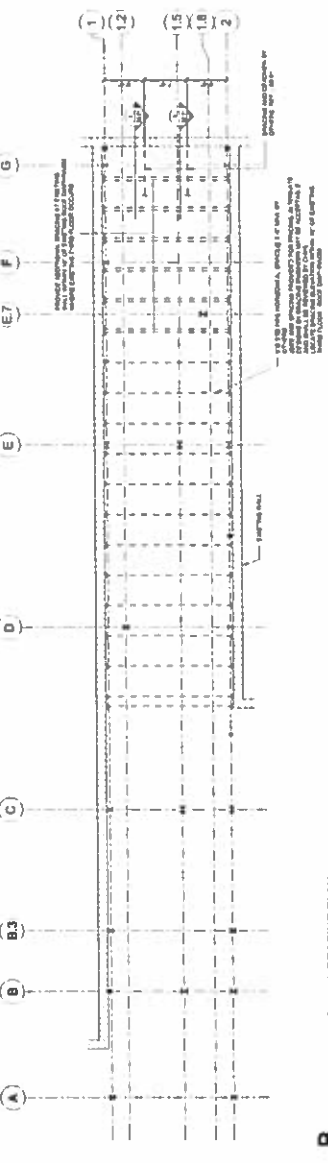


- NOTES:**
1. EXISTING WALL AND BRACING SYSTEM SHALL BE REINFORCED AND STRENGTHENED TO SUPPORT THE NEW WALL AND BRACING SYSTEM.
 2. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO SUPPORT THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 3. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 4. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 5. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 6. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 7. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 8. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 9. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.
 10. ALL NEW BRACING SYSTEMS SHALL BE DESIGNED TO RESIST THE FULL WEIGHT OF THE WALL AND BRACING SYSTEM.

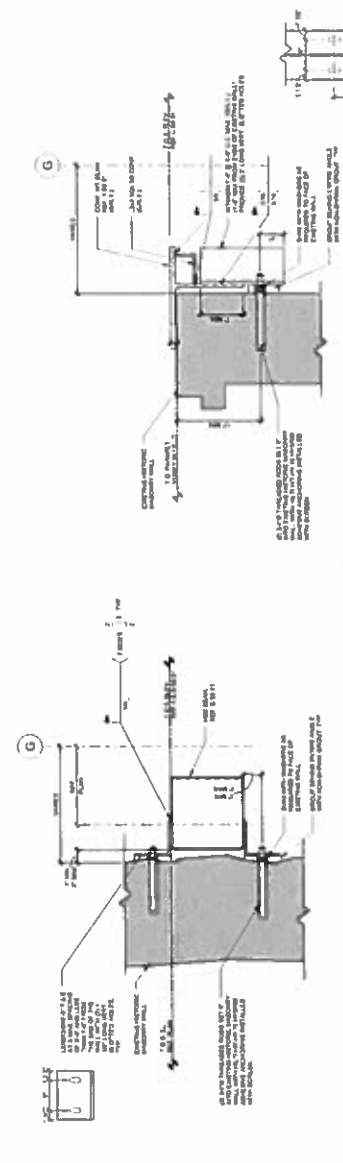
1 SECTION AND NOTES AT EXISTING DEMISING WALL BRACING
SCALE: 1/4" = 1'-0"



A LEVEL 2 EXISTING WALL BRACING PLAN
SCALE: 1/4" = 1'-0"



B LEVEL 3 EXISTING WALL BRACING PLAN
SCALE: 1/4" = 1'-0"



2 TYPICAL BEARING SURFACE PREPARATION AT HSS BEAMS
SCALE: 1/4" = 1'-0"

3 TYPICAL BEARING SURFACE PREPARATION AT WT BEAM
SCALE: 1/4" = 1'-0"

TRANSMITTAL



RESUBMITTAL TRANSMITTAL

To: 1601 South Mopac Expressway **Date:** 04/19/17
100D
Austin, TX 78746

Attn: Warren Ince

RE: 4058N 916 Congress Buildback

FOR YOUR:

- ☒ Records
- ☐ Information
- ☐ Signature
- ☒ Review & Approval
- ☒ Distribution
- ☐ Immediate Pricing

SENT VIA:

- ☒ Courier
- ☐ Standard Mail
- ☐ Hand Delivered
- ☐ Fax
- ☐ ELECTRONIC

We are sending you the following submittals for your review. Please reply promptly:

Copies	Submittal #	Description	Notes
1-elec	316329-01-D	Shoring	Shop Drawings

Stefanie Young, Project Coordinator
Cc: TBG Files

Stefanie@burtgroup.com
The Burt Group, Inc.
4023: (512) 275-0883

2111 Kramer Lane Suite 100 Austin, Texas V. 512.275.0881 F. 512.275.0883

THE LOAD LIMIT

- | | |
|---|-----------------------------|
| - | CLAMP, HORIZONTAL SHORE |
| - | CLAMP, VERTICAL SHORE |
| - | 2x6 ADJUSTABLE JACK WAGON |
| - | ADJUSTABLE SCREW JACK |
| - | BRACE AS REQUIRED BY OTHERS |
| - | BASE PLATE, SHORE |
| - | BASE PLATE, STEEL |
| - | 8 1/2" ALUMINUM BEAM |
| - | 8 1/2" ALUMINUM STRONGER |
| - | CROSSBRACE |
| - | 5"x8" X HEAD |
| - | POST BRACING BY CORNER |
| - | POST SHORE WALKER PLATE |
| - | RIVET AND NUT PH |
| - | STEEL SHORE CLAMP |
| - | SHORE FRAME WALKER PLATE |
| - | 3' x 8" DUB U-HEAD |
| - | 4' x 8" U-HEAD ADAPTER |
| - | U-HEAD TWO WAY |
| - | UNIVERSAL CONNECTOR |
| - | VERTICAL STEEL SHORE |
| - | WOMBY DAMPENER |
| - | SHORE TOWER (PLAN VIEW) |

REFERENCE ATTACHED SAFETY SHEETS) FOR
ALL GENERAL NOTIA SAFETY GUIDELINES,
AND PRODUCT IDENTIFICATION



James K. Chell
4-17-2017

THE U.S. APPLE INC. IS THE APPLE AT THE TOP OF THE APPLE. THE U.S. APPLE IS THE APPLE AT THE TOP OF THE APPLE.

MAILING LIST

☐ MAIL COMPANY SET ADDRESS ONLY
☐ NOT FOR DISTRIBUTION

☐ SEND FOR A/R - INC APPROX AL
☐ SEND FOR CONTRACTS APPROX AL
☒ SEND FOR CONSTRUCTION
☐ OTHER - ALL OTHER'S COPIES

SEND TO: A/C DATE: 4-10-87

STATION NUMBER	LOCATION	DEPTH	DATE
1	ON THE BEACH	A.C.	1/24/77
2	ON THE BEACH	A.C.	2/9/77
3	ON THE BEACH	A.C.	4/2/77
4	ON THE BEACH	A.C.	1/4/77

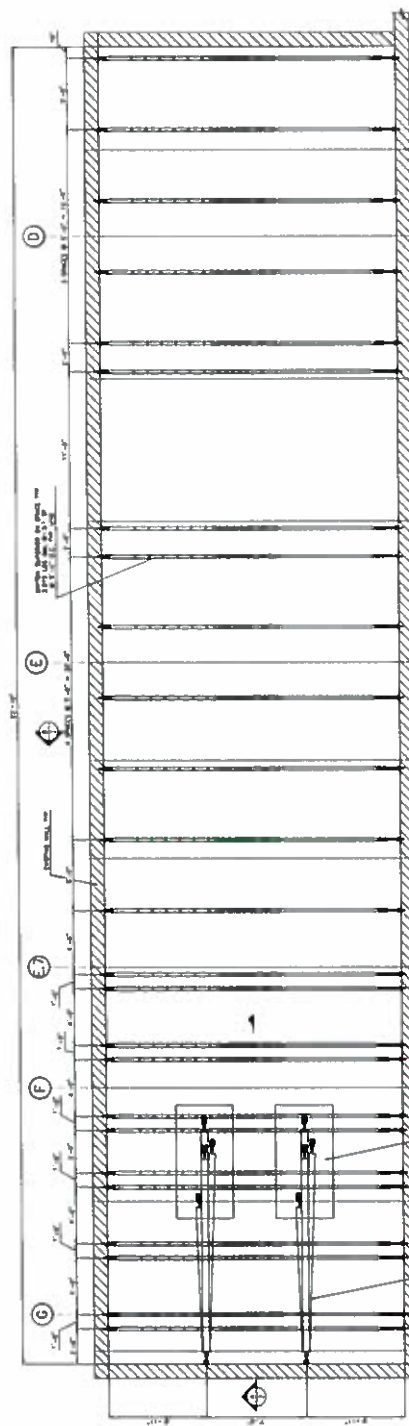
916 CONGRESS

LOCATION: AUSTIN,

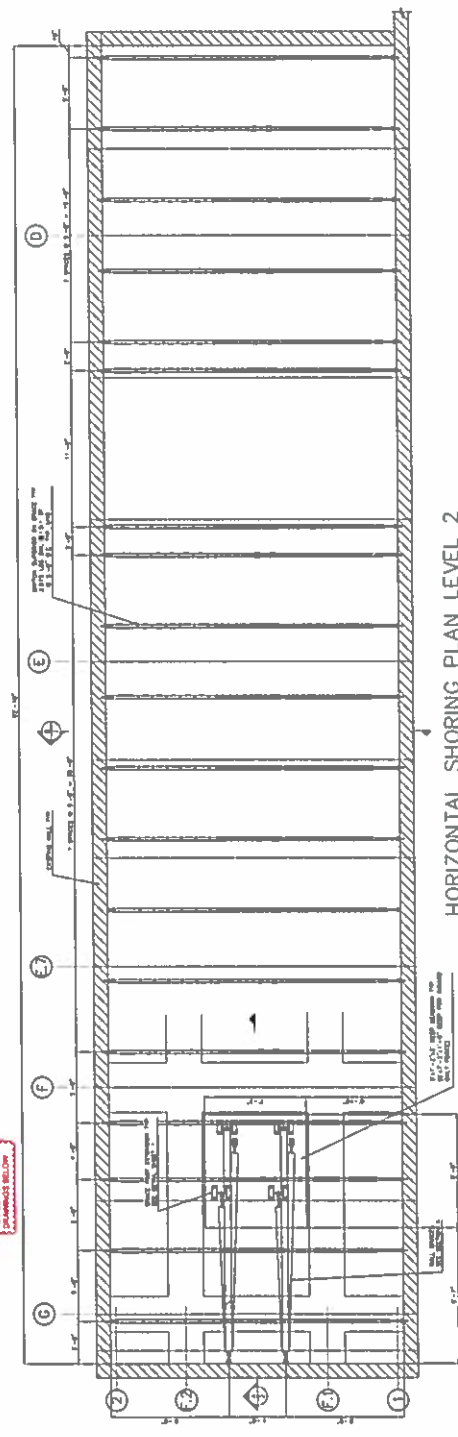
DATE	05-17-116	TIME	11:00 AM
LOCATION	DALLAS	REPORTED BY	11:00 AM

JC
01/20/2017
BAY
ATCP
DATE REC'D

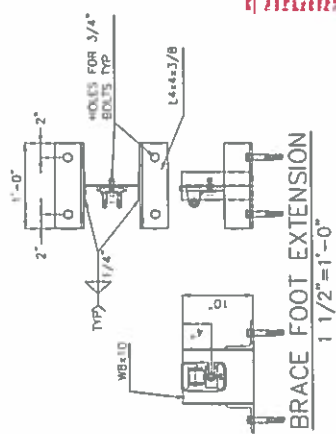
SHEET #: 1



HORIZONTAL SHORING PLAN LEVEL 3



HORIZONTAL SHORING PLAN LEVEL 2



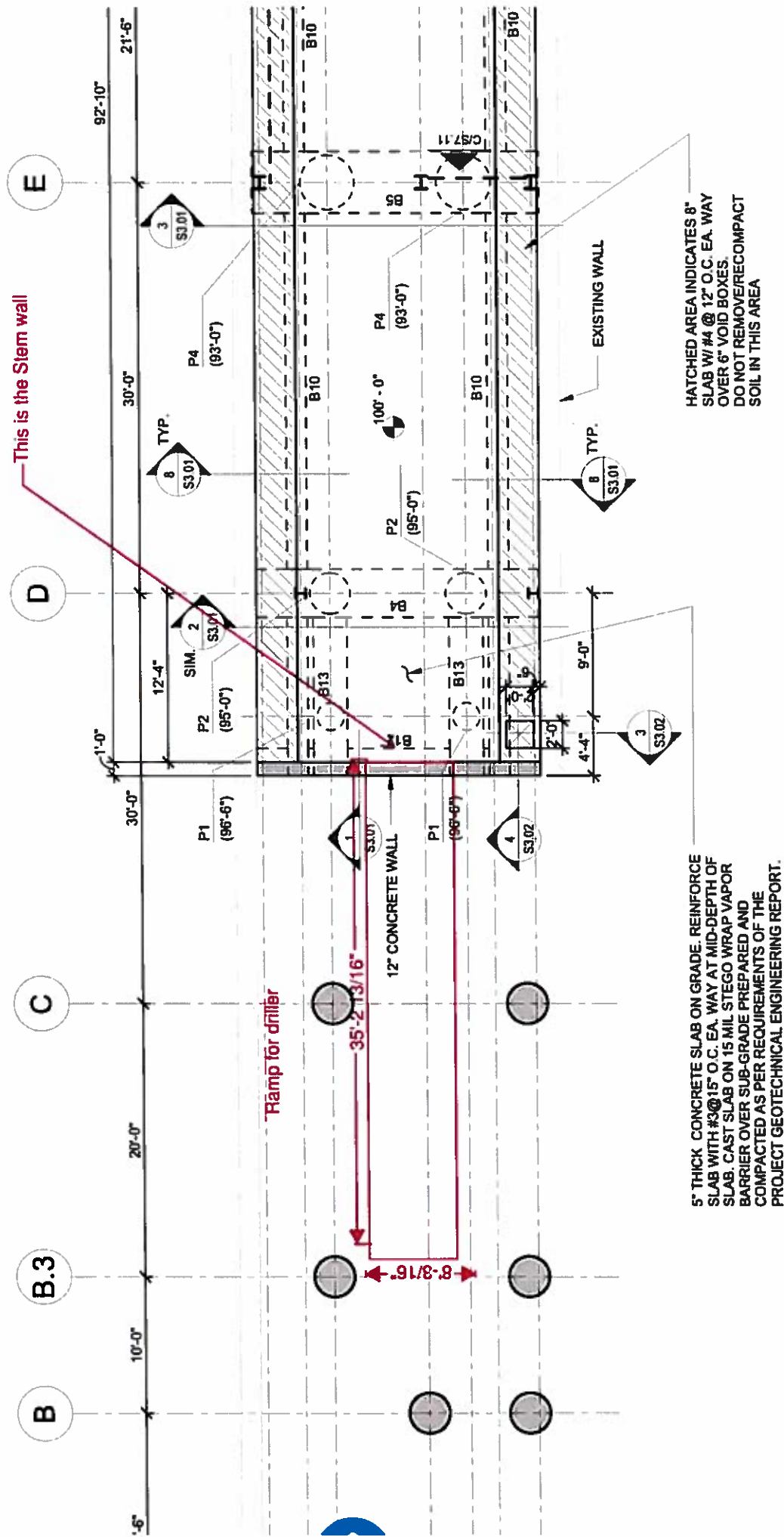
These past savings and investments saved by single tax (implication) is equal to the total savings (to a) primary sector by Charles Haysley (Haysley). The savings and costs on both side (except and additions are the) representing of the tax and its negative implications (Expense) which is at (total) savings and costs and additions.



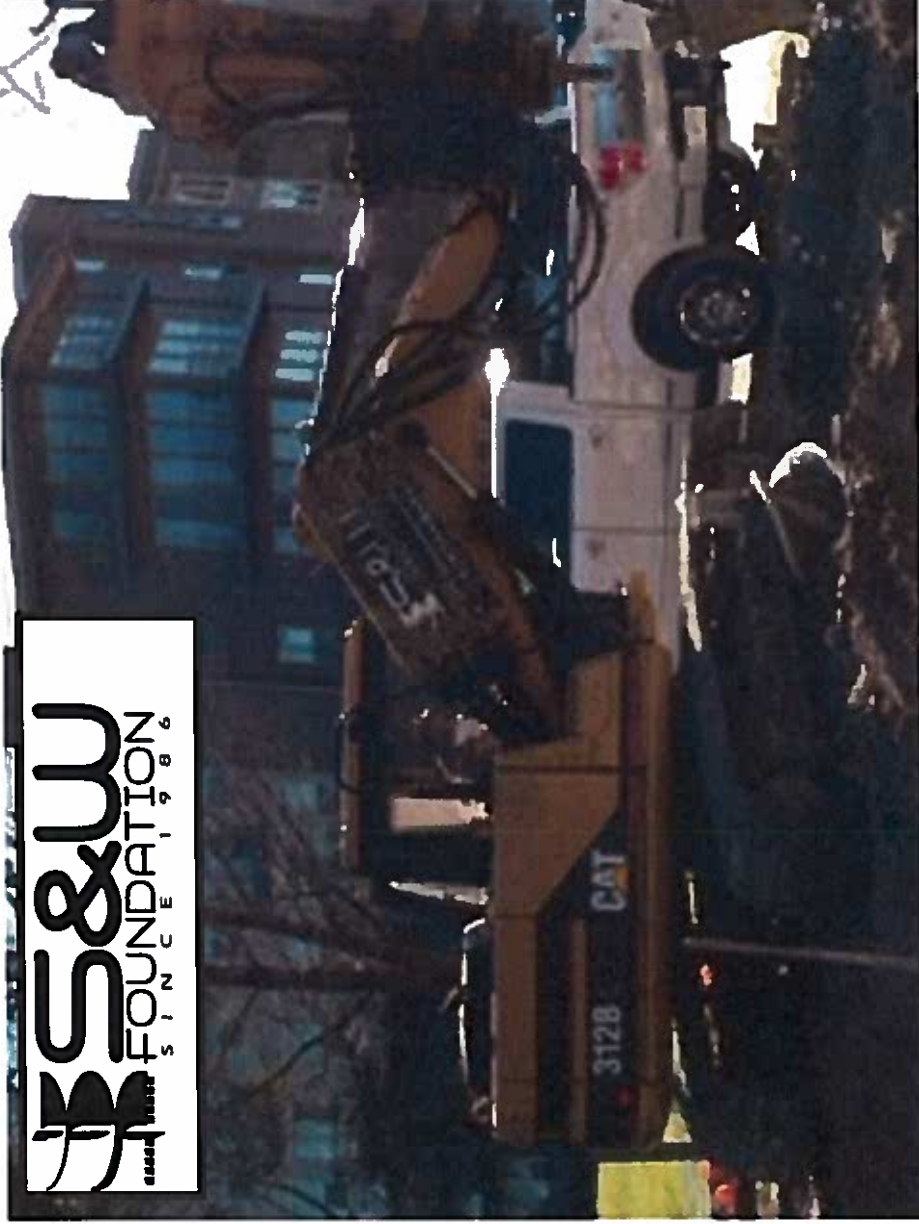
SECTION A
1/2"=1'-0"

SHEET # 2

Exhibit C-
Ramp Sketch & Drill Rig



FRAMING PLAN



Dimensions

- Operating Height = 13 ft.
- Travel Height = 9 ft. – 6 in.
- Overall Length = 21 ft. – 6 in.
- Width = 9 ft. – 0 in.
- Weight = 42,000 lbs.

Capabilities

- Drilling Diameter (minimum) = 16 in.
- Drilling Diameter (maximum) = 60 in.
- Drilling Depth = up to 60 ft.
- Torque = 20,000 ft.-lbs.

Exhibit D-
Building Permit & Approved Certificate of
Appropriateness



DATE of SUBMISSION:

**Application for Certificate of Appropriateness
for a City Landmark or Local Historic District**

Adopted December 2012

Permit Information	
For Office Use Only	BP- _____ PR- _____ C14H/LHD - <u>1982-0001-F</u>
	Property Name or LHD: <u>Lammam Block - F</u> Contributing / Non-contributing
	<input type="checkbox"/> RELEASE PERMIT <input type="checkbox"/> DO NOT RELEASE PERMIT <input type="checkbox"/> HLC REVIEW _____ FEE PAID: \$ <u>426.40</u>
	HISTORIC PRESERVATION OFFICE _____ DATE: _____
Property Information	
Address: <u>916 Congress Ave., Austin, Texas 78701</u>	
Scope of Work	
<u>15,500 GSF of new Construction, 5 floors A.G. and a roof deck behind the preserved existing historic facade.</u>	
Applicant	
Name: <u>Thomas Boes - Project Manager - Sixthriver Architects</u>	
Address: <u>3601 South Congress Ave.</u>	
City/Zip: <u>Austin, 78704</u>	
Phone: <u>512-306-9928</u>	
Email: <u>tboes@sixthriver.com</u>	
Owner	
Name: <u>Trey Watson - W Capital Partners</u>	
Address: <u>515 Congress Avenue, Suite 1400</u>	
City/Zip: <u>Austin, Texas 78701</u>	
Phone: <u>512-330-9723</u>	
Email: <u>trey@wcapitalpartners.net</u>	
Architect or Contractor Information	
Company: <u>Sixthriver Architects</u>	
Address: <u>3601 South Congress Ave</u>	
City/Zip: <u>Austin 78704</u>	
Phone: <u>512-306-9928</u>	

APPROVED BY**HISTORIC LANDMARK COMMISSION**DATE: 8-7-13BY: Steve Sadowsky
for HLC Chair

Owner's Signature

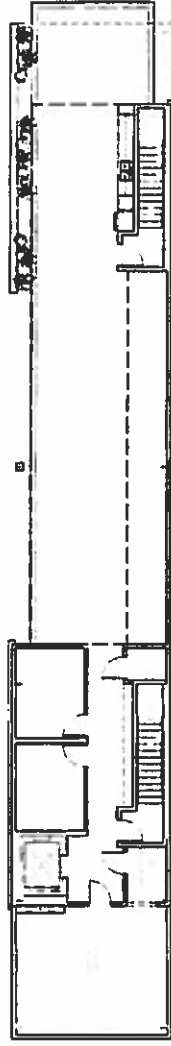
Date

Applicant's Signature

Date

APPROVED BY HISTORIC LANDMARK COMMISSION

DATE: 8-7-13
BY: Steve Sabersky
for HLC Chair



R



5

SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
SUITE C300
AUSTIN, TEXAS 78704
P 512.306.8828
F 512.306.7725

FLOOR PLANS: LEVELS 5 & 6/ROOF

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

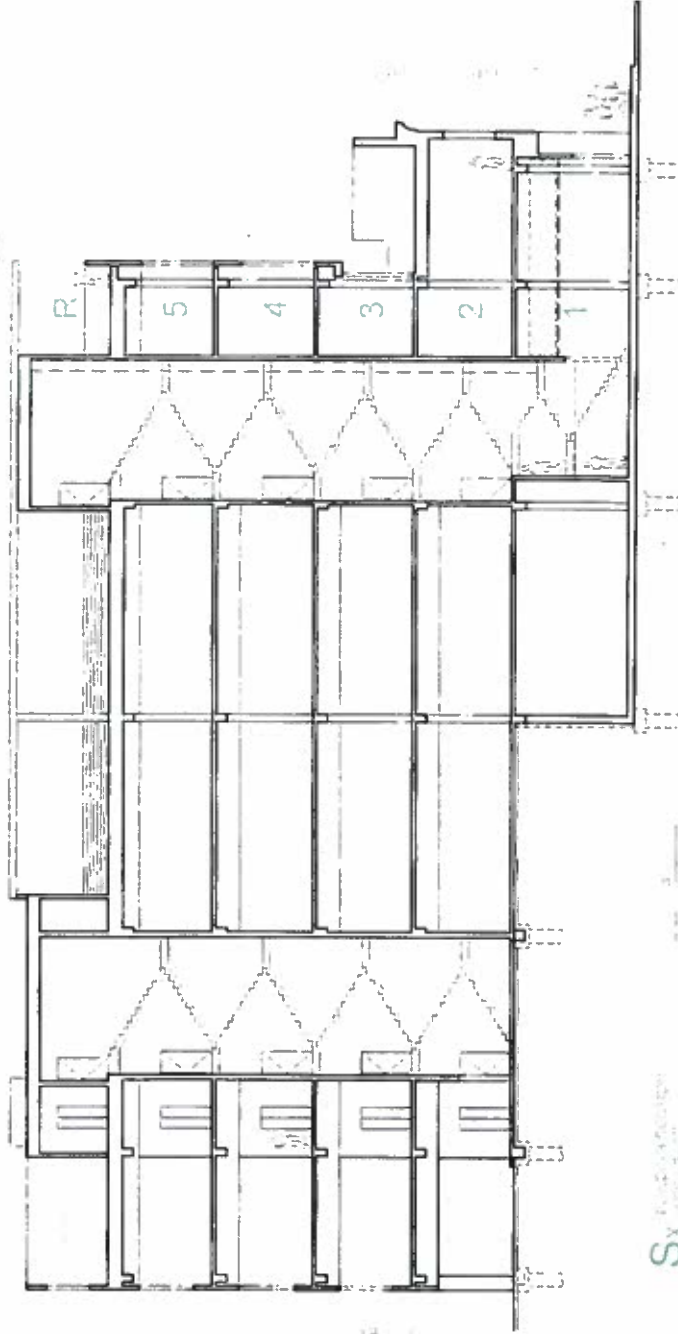
7.11.13
SCES
13101

SCALE: 1/16"=1'-0"

5 OF 13

A.5

APPROVED BY
HISTORIC LANDMARK COMMISSION:
 DATE: 8-17-13
 BY: Steve Lindorsey
 for HLC Chair



SCALE: 1/16"=1'-0"

BUILDING SECTION: SOUTH

SIXTHRIVER ARCHITECTS

3601 SOUTH CONGRESS AVENUE
 SUITE 0300
 AUSTIN, TEXAS 78704
 P 512.306.1920
 F 512.306.7026

916 CONGRESS
 916 CONGRESS AVENUE
 AUSTIN, TEXAS 78701

6 OF 13

A.6

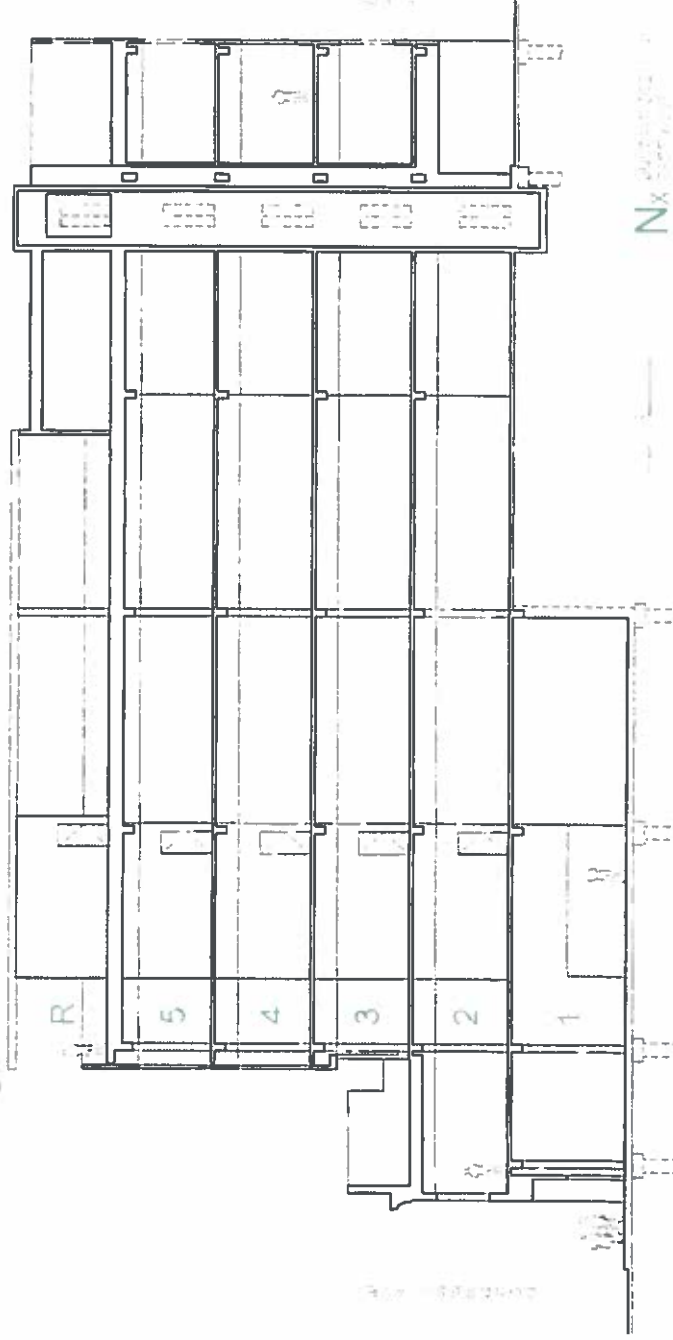
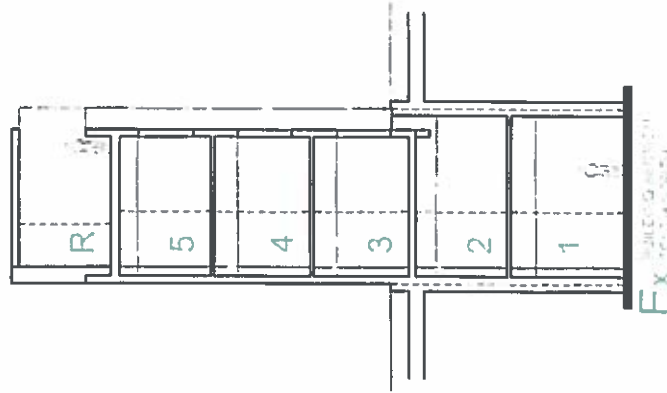
71113
 BCEB
 13131

APPROVED BY

HISTORIC LANDMARK COMMISSION

DATE: 8-7-13

BY: *Steve Sadovsky*
for HLC Chair



100-2 SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS

3021 SOUTH CONGRESS AVENUE
SUITE 6000
AUSTIN, TEXAS 78704
P 512 306 9929
F 512 306 7825

BUILDING SECTION: EAST & NORTH

916 CONGRESS

916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

SCALE: 1/16"=1'-0"

7 OF 13

A.7

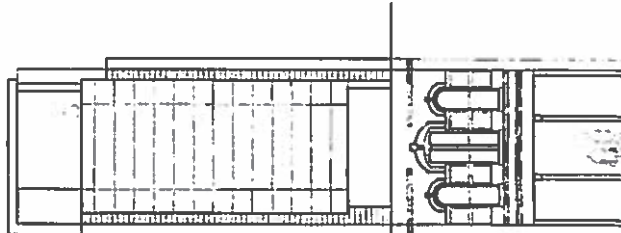
7/11/13
BOS
13131

APPROVED BY

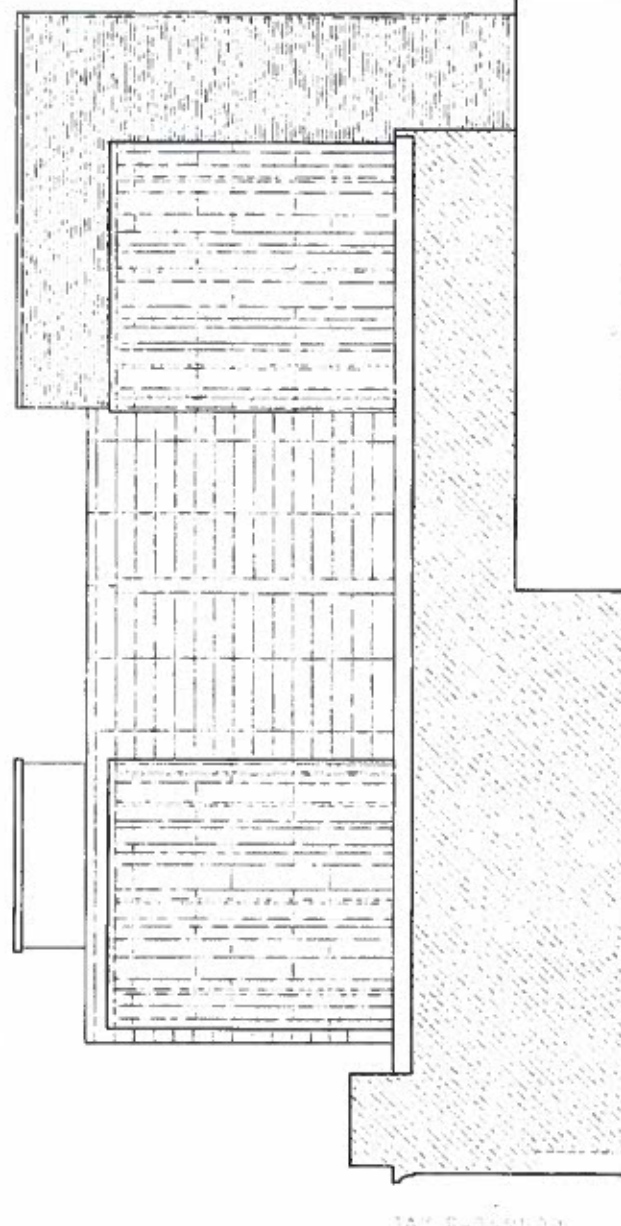
HISTORIC LANDMARK COMMISSION

DATE: 8-7-13

BY: Steve Sabourty
for HLC Chair



E



N

SCALE: 1/16"=1'-0"

8 OF 13

A.8

ELEVATION: EAST | NORTH

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

7.11.13
BCE
13131

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
SUITE 0300
AUSTIN, TEXAS 78704
P 512.306.1929
F 512.306.1928

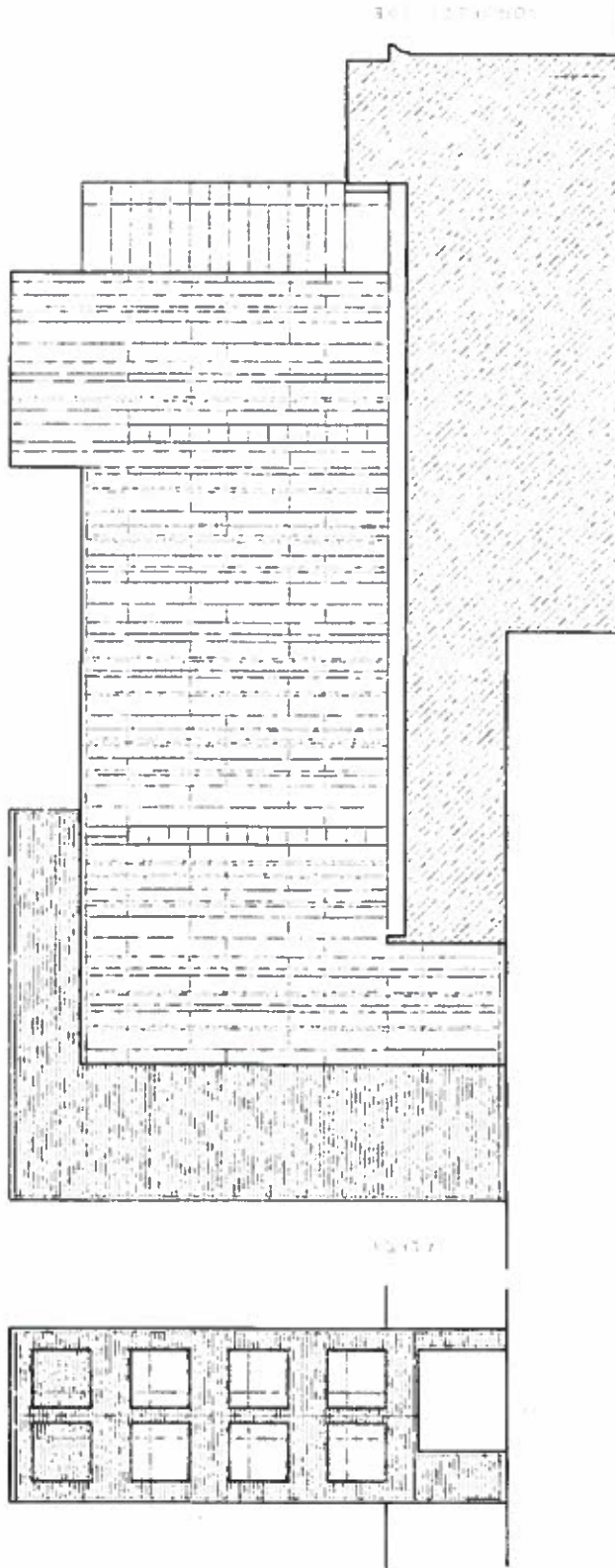


APPROVED BY

HISTORIC LANDMARK COMMISSION

DATE: 8-7-13

BY: Steve Ladosky
for HLC Chair



W. SIXTH RIVER ARCHITECTS

SCHEMATIC DESIGN PHASE

SIXTH RIVER ARCHITECTS
3001 SOUTH CONGRESS AVENUE
SUITE 6300
AUSTIN, TEXAS 78704
P 512 305 8928
F 512 305 7023



ELEVATION: WEST | SOUTH

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

6.5.13
BCES
13131

SCALE: 1/16"=1'-0"

9 OF 13

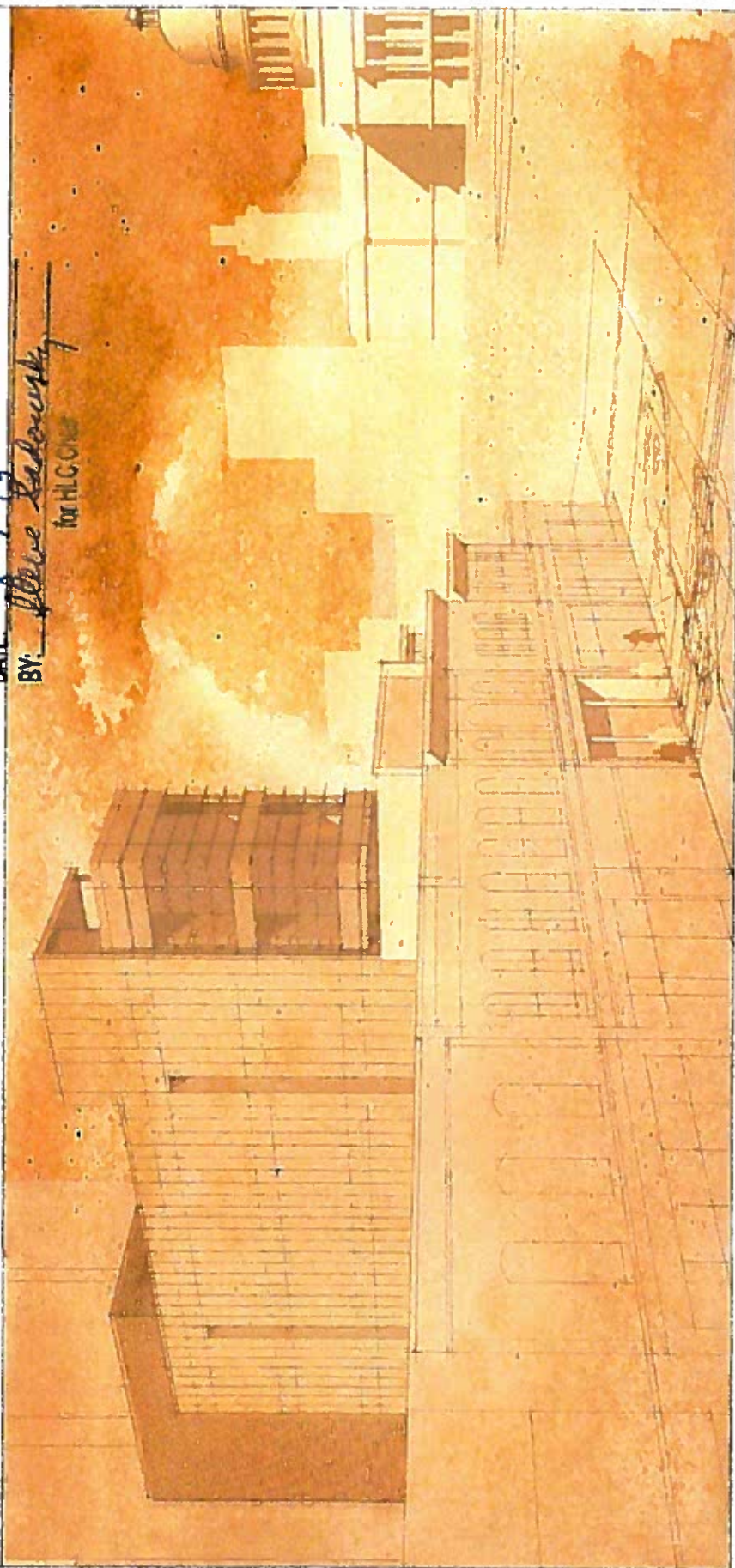
A.9

APPROVED BY

HISTORIC LANDMARK COMMISSION

DATE: 8-7-13

BY: Oliver R. R. R. R. R.
for HLCC



LOOKING NORTHWEST

SCHEMATIC DESIGN PHASE

CONCEPTUAL RENDERING

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
SUITE 300
AUSTIN, TEXAS 78704
P 512 306 9925
F 512 306 7626

SCALE: 1/16"=1'-0"

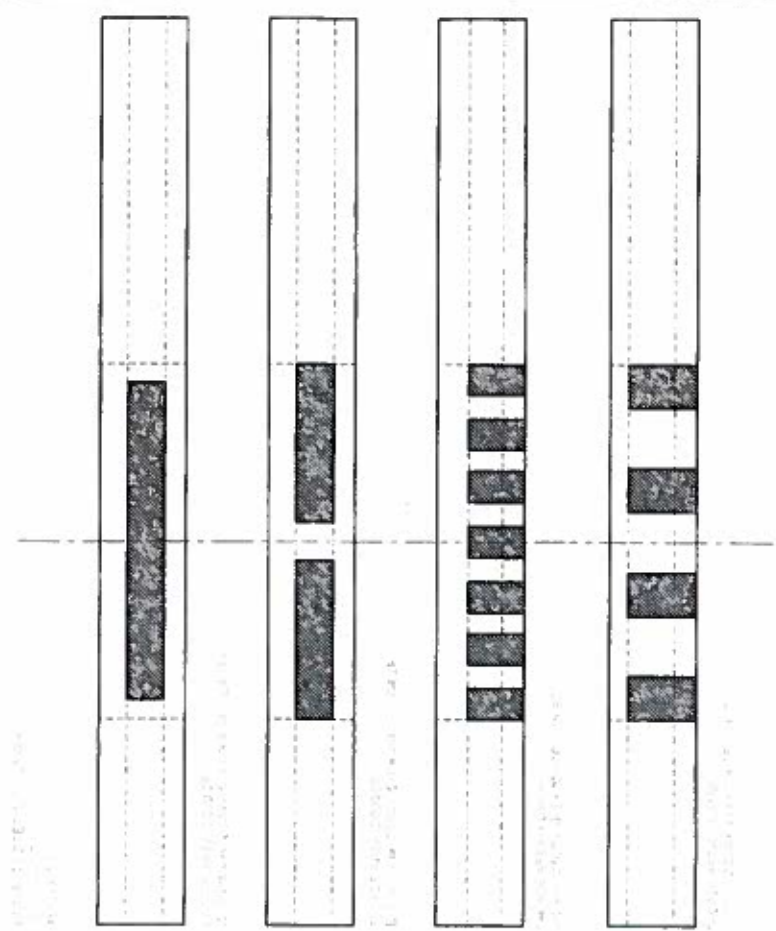
10 OF 13

A.10

7.11.13
BCEB
13131

APPROVED BY HISTORIC LANDMARK COMMISSION

DATE: 8-7-13
BY: Steve Haddock
for HLC Chair



SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS
301 SOUTH CONGRESS AVENUE
SUITE 0200
AUSTIN, TEXAS 78704
P 512.308.9928
F 512.308.7728

BUILDING SUMMARY

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

SCALE: 1/16"=1'-0"

13 OF 13

A.13

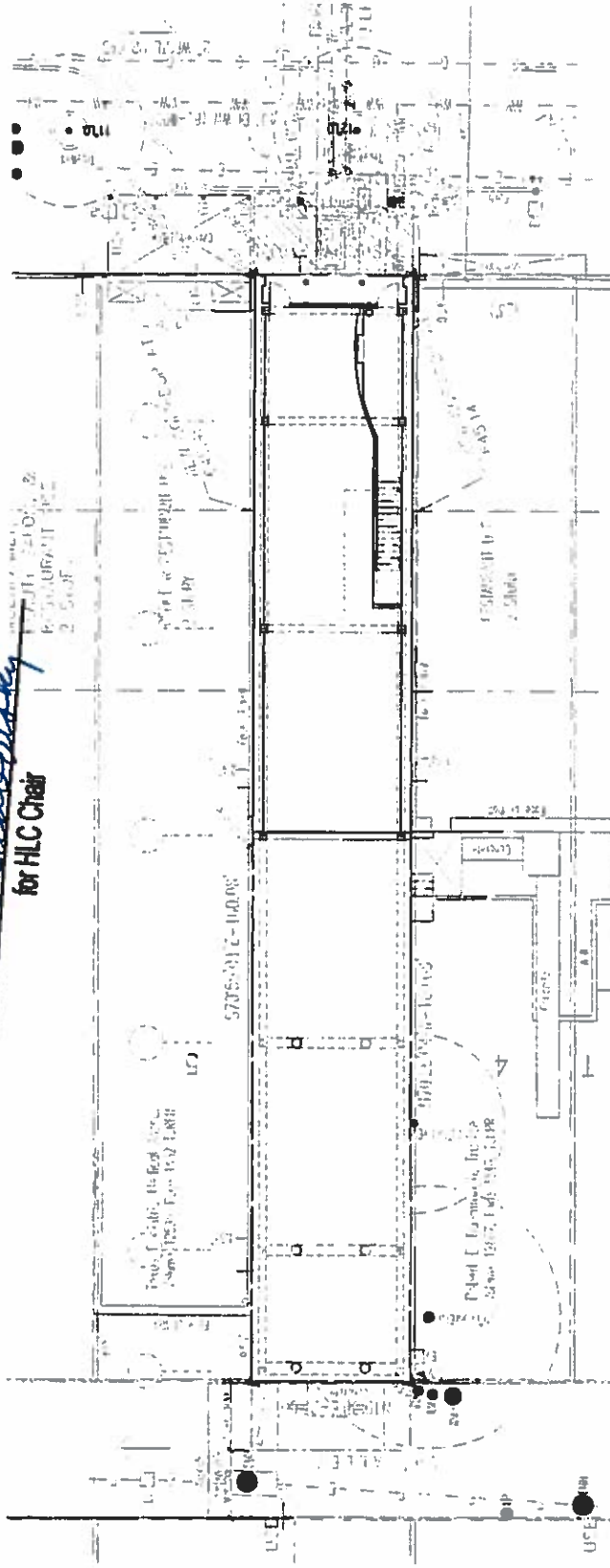
7.11.13
BCES
13131

APPROVED BY

HISTORIC LANDMARK COMMISSION

DATE: 8-7-13

BY: *Ann L. Lohmeyer*
for HLC Chair



SIXTH RIVER ARCHITECTS



3001 SOUTH CONGRESS AVENUE
SUITE 0300
AUSTIN, TEXAS 78704
P 512.305.1929
F 512.305.1765

LEVEL 1 SITE PLAN

SCALE: 1/16"=1'-0"

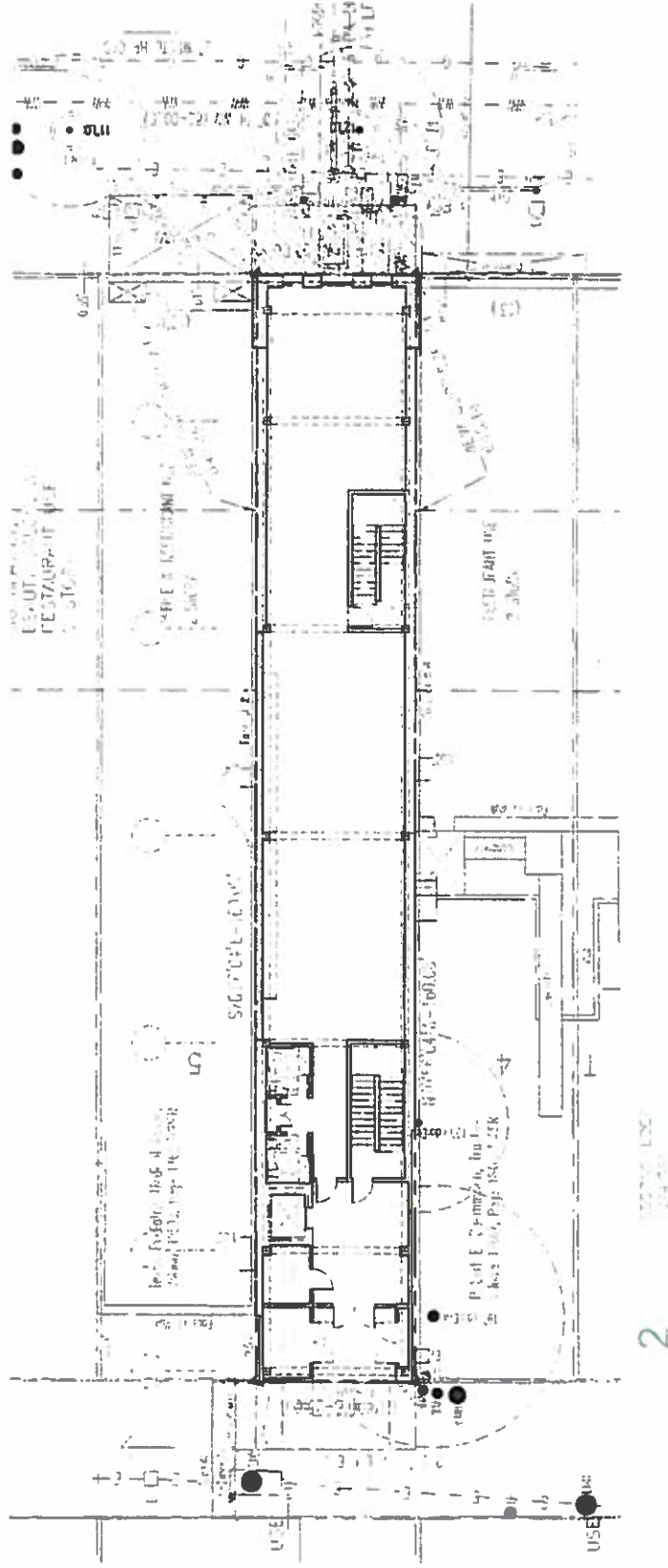
916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

1 OF 13

A.1

7.5113
BOES
13131

APPROVED BY
HISTORIC LANDMARK COMMISSION
 DATE: 8-7-13
 BY: Steve Sablosky
 for HLC Chair



SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
 SUITE 6300
 AUSTIN, TEXAS 78704
 P 512 305 9928
 F 512 305 7500

LEVEL 2 SITE PLAN

SCALE: 1/16"=1'-0"

916 CONGRESS
 916 CONGRESS AVENUE
 AUSTIN, TEXAS 78701

2 OF 13

A.2

7.11.13
 BOES
 13131

APPROVED BY
HISTORIC LANDMARK COMMISSION

DATE: 8-7-13
BY: *Steve Saborsky*
for HLC Chair



SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
SUITE C300
AUSTIN, TEXAS 78704
P 512.306.9028
F 512.306.7028

FLOOR PLANS - LEVELS 1 & 2

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

7/11/13
RCS
13121

SCALE: 1/16"=1'-0"

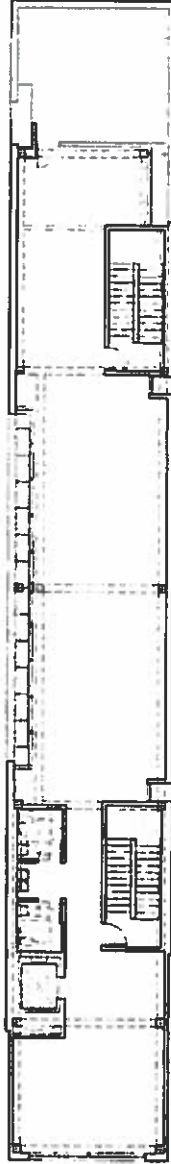
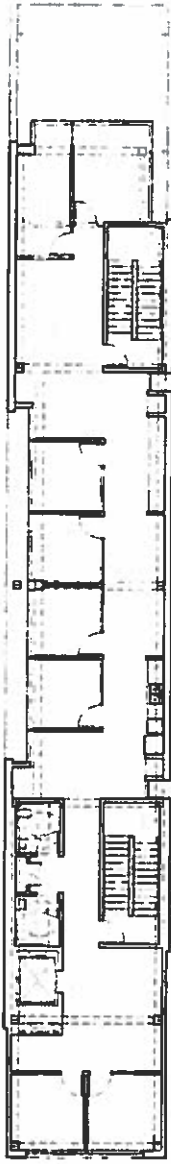
3 OF 13

A.3

APPROVED BY

HISTORIC LANDMARK COMMISSION

DATE: 8-7-13
BY: Steve Sadavsky
for HLC Chair



ISSUE: SCHEMATIC DESIGN PHASE

SIXTHRIVER ARCHITECTS

3001 SOUTH CONGRESS AVENUE
SUITE 6300
AUSTIN, TEXAS 78704
P 512.306.9228
F 512.306.7228

FLOOR PLANS: LEVELS 3 & 4

916 CONGRESS
916 CONGRESS AVENUE
AUSTIN, TEXAS 78701

7.11.13
6063
13131

SCALE: 1/16"=1'-0"

4 OF 13

A.4



City of Austin BUILDING PERMIT

PERMIT NO: 2015-112070-BP

916 CONGRESS AVE

Type: COMMERCIAL

Status: Active

Issue Date: 09/24/2015

EXPIRY DATE: 08/22/2017

LEGAL DESCRIPTION S 23FT OF LOT 5 BLOCK 110 ORIGINAL CITY					SITE APPROVAL SP-2014-0058C		ZONING CBD									
PROPOSED OCCUPANCY: New SHELL Bldg (Admin/Bus Office)			WORK PERMITTED: Shell			ISSUED BY: Diana Cortinas										
<table border="1"> <tr> <td>TOTAL SQFT New/Addn: 16,071</td> <td>VALUATION Tot Val Rem: \$0.00 Tot Job Val: \$4,200,000.00</td> <td>TYPE CONST. 1B</td> <td>USE CAT. 324</td> <td>GROUP A-2,</td> <td>FLOORS 6</td> <td>UNITS 1</td> <td># OF PKG SPACES</td> </tr> </table>									TOTAL SQFT New/Addn: 16,071	VALUATION Tot Val Rem: \$0.00 Tot Job Val: \$4,200,000.00	TYPE CONST. 1B	USE CAT. 324	GROUP A-2,	FLOORS 6	UNITS 1	# OF PKG SPACES
TOTAL SQFT New/Addn: 16,071	VALUATION Tot Val Rem: \$0.00 Tot Job Val: \$4,200,000.00	TYPE CONST. 1B	USE CAT. 324	GROUP A-2,	FLOORS 6	UNITS 1	# OF PKG SPACES									
TOTAL BLDG. COVERAGE		% COVERAGE	TOTAL IMPERVIOUS COVERAGE		% COVERAGE											

Contact	Phone	Contact	Phone
Applicant, CERA LANDA, SIXTH RIVER ARCHITECTS, INC	(512) 308-0928	Billed To, W CAPITAL PARTNERS	(512) 330-9723
Billed To, Buzz Hughes	(512) -	General Contractor, The Burt Group	(512) 848-4158

Fee Desc	Amount	Date	Fee Desc	Amount	Date	Fee Desc	Amount	Date
Building Permit Fee	1,295.00	9/24/2015	Building Plan Update Fee	541.00	9/3/2015	Development Services Surch	219.38	9/30/2014
Development Services Surch	21.84	9/3/2015	Development Services Surch	51.80	9/24/2015	Development Services Surch	29.20	2/21/2017
Development Services Surch	1.68	2/23/2017	Expiry Building Permit Fee	42.00	2/23/2017	Notification/Renotification	580.00	2/21/2017
Plan Review Fee	5,484.00	9/30/2014	Sign Fee - PAZ	170.00	2/21/2017	Site Inspection Fee - Building	37.00	9/24/2015
Fees Total:	8,452.68							

Inspection Requirements

Building Inspection	Electric Inspection	Environmental Inspection	Fire Inspection
Landscaping Inspection	Mechanical Inspection	Plumbing Inspection	Sewer Tap Inspection
Water Tap Inspection			

All Buildings, Fences, Landscaping, Patios, Flatwork And Other Uses Or Obstructions Of A Drainage Easement Are Prohibited, Unless Expressly Permitted By A License Agreement Approved By COA Authorizing Use Of The Easement.

City Code Chapter 25-12, Article 13: A permit expires on the 181st day if the project has not scheduled nor received an inspection. A "Cancelled" and/or "Failed/No Work Performed" inspection result does not extend the expiration date.

The following permits are required as a separate permit: See Mechanical, Electrical, Plumbing permits for Related Fees and Inspections.

Comments

Project Name 916 CONGRESS**

Commercial Building Plans

Date	Reviewer
09/09/2015	Emeka Onuoha

By Accepting Or Paying For This Permit You are Declaring That You Are The Owner Or Authorized By The Owner That The Data Submitted At The Time Of Application Was True Facts And That The Work Will Conform To The Plans And Specification Submitted Herewith.

5602130
PLANNIT CENTER
605 BARTON SPRINGS RD-1STFL
AUSTIN TX 78704
512-574-2584

City of Austin
P.O. Box 1088, Austin, Texas 78767

RECEIPT

Sale

Payment 02/23/2017

Invoice 6498536

Date:

No.:

XXXXXXXXXXXX3768

VISA

Entry Method: Swiped

02/23/17

08:15:35

ne:

Inv #: 000001

Appr Code: 142533

uzz Hughes

Apprvd: Online

Batch#: 054001

008 CHENO CORTINA TRL

Total:

\$ 43.68

USTIN TX 78749

Customer Copy

SA

Payment Received: \$43.68

Amount Applied: \$43.68

Cash Returned: \$0.00

Comments: AUTH142533-3768

Additional Information

Department Name: Development Services Department

Receipt Issued By: Kimberly Morrison

Receipt Details

FAO Codes	Fee Description	Internal Ref. No.	Address	Permit/Case No.	Amount
1000 5300 9770 4053	Expired Building Permit Fee	11416756	915 CONGRESS AVE	2015-112070-BP	\$42.00
8131-6807-1113-4066	Development Surcharge	11416756	916 CONGRESS AVE	2015-112070-BP	\$1.68
Total					\$43.68